

Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: POET Biorefining – Emmetsburg, LLC

Facility Location: 4724 380th Street, Emmetsburg, Iowa 50536

Air Quality Operating Permit Number: 14-TV-003R1

Expiration Date: March 31, 2024

Permit Renewal Application Deadline: September 30, 2023

EIQ Number: 92-6932

Facility File Number: 74-01-022

Responsible Official

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
gr./100 cf	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS	new source performance standard
ppmv	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPY	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: POET Biorefining - Emmetsburg

Permit Number: 14-TV-003R1

Facility Description: Ethyl Alcohol Manufacturing (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP SV1	EU1, EU2, EU3	Grain Receiving, Handling and Storage	04-A-219-S6
EP SV2	EU4	Corn Scalper, Conveyor, Surge Bin	04-A-220
EP SV3	EU5	Hammermill 1	04-A-221-S3
EP SV4	EU6	Hammermill 2	04-A-222-S1
EP SV5	EU7	Hammermill 3	04-A-223-S1
EP SV20	EU25	Hammermill 4	04-A-1068-S1
EP SV6	EU8	Pneumatic Flour Conveyor/Receiver	04-A-224
EP SV007	EU9, EU10,	RTO Bypass Stack: Fermenters, Beer Wells, Distillation Equipment	04-A-225-S5
EP SV09	EU11, EU12, EU13, EU14, EU15, EU16, EU17, EU18, EU19	RTO Stack, 6 Fermenters, Centrifuges	04-A-227-S7
EP SV10	EU19	Distiller's Dried Grains with Solubles (DDGS) Fluid Bed Cooler	04-A-228-S3
EP SV11	EU20	DDGS Storage Silo	04-A-229
EP SV12	EU21	DDGS Storage Silo Bypass	04-A-230-S1
EP SV13	EU22	Boiler 1	04-A-231-S3
EP SV19	EU23	Boiler 2	04-A-1067-S2
EP SV21	EU24	Diesel Generator	04-A-1069
EP SV14	EUTK-001	Denaturant Storage Tank	04-A-232-S1
EP SV15	EUTK-002	190 Proof Ethanol Storage Tank	04-A-233
EP SV16	EUTK-003	200 Proof Ethanol Storage Tank	04-A-234-S2
EP SV17	EUTK-004	200 Proof Ethanol Storage Tank	04-A-235-S1
EP SV18	EUTK-005	200 Proof Ethanol Storage Tank	04-A-236-S1
EP SV022	EU014-EU018	5 Centrifuge Units (RTO Bypass)	17-A-439-S1
EP SV Flare	EU Flare	Truck and Rail Loading Rack	04-A-237-S7
EP SV031	EU044	Biomass Receiving Building	10-A-337-S2
EP SV032	EU045	Biomass Shredding	10-A-338-S4

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP SV034	EU047	Fines Transfer	10-A-340-S4
EP SV035	EU048	Biomass Washer	10-A-341-S5
EP SV036	EU050	Liberty Fermentation & Distillation Process	10-A-343-S7
EP SV038	EU051	Liberty Biomass Flare	10-A-344-S6
EP SV041	EUTK007	Liberty 190 Proof Ethanol Storage Tank	10-A-347-S2
EP SV043	EU056	Biomass Bunker East	13-A-120-S2
EP SV044	EU057	Biomass Bunker West	13-A-121-S2
EP SV045	EU058	Net Wrap/Twine/Stover Filter Receiver	13-A-122-S2
EP SV046	EU059, EU075	Ash Silo, Ash Grinder	13-A-123-S4
EP SV047	EU060	Lime Silo	13-A-124-S2
EP SV048	EU061	Ash Loadout	13-A-125-S4
EP SV050	EU063, EU076	Bed Additive Storage Tank/Bin Vent	13-A-127-S3
EP SV051	EU064	Sulfamic Acid Bag Unloading	13-A-128-S2
EP SV052	EU065	OSM Enzyme Production	16-A-494-S1
EP SV053	EU066	Sulfur Cake Loadout Conveyors	13-A-130-S2
EP SV054	EU067	Shredder Stover Transfer Airlock	13-A-131-S3
	EU074	Biomass Metering Bin	
EP SV055	EU068	Bale Core	13-A-132-S1
EP SV058	EU069	Solid Fuel Boiler	13-A-135-S6
EP SV059	EU070	Diesel Generator	13-A-136-S1
EP SV060	EU071	Diesel Fire Pump	13-A-137-S1
EP SV062	EU073	Bed Additive Storage Tank #2	16-A-014-S1
EP FS002, FS005, FS007	EU FS002, EU FS005, EU FS007	Fugitive Equipment Leaks & Tank Farm Fugitives	05-A-863-S4
EP FS003	EU FS003	Cooling Tower	05-A-862
EP FS004	EU FS004	Fugitive Dust from Truck Traffic	05-A-864-S6
EP FS006	EU FS006	Liberty Cooling Tower	08-A-634-S2
EP FS008	EU FS008	Wet Cake Production	17-A-440-S2
EP FS009	EU FS009	Cob Handling and Storage	09-A-509-S1
EP FS011	EU FS011a	Sulfur Cake Loadout	10-A-349-S2

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TK006	Scale House Diesel AST
TK007	Warehouse Diesel AST
TK008	Fire Pump Diesel AST
TK009	Emergency Generator for Diesel AST
Heater #1	Space Heater 5.9616 MMBtu/hr
Heater #2	Space Heater 5.9616 MMBtu/hr

II. Plant-Wide Conditions

Facility Name: POET Biorefining - Emmetsburg
Permit Number: 14-TV-003R1

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: April 1, 2019
Ending on: March 31, 2024

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be

used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

40 CFR 60 Subpart A Requirements

This facility is an affected source and these General Provisions apply to the facility. The affected units are EP SV1, EP SV7, EP SV9, EP SV13, EP SV19, EP SV14, EP SV15, EP SV16, EP SV17, EP SV18, EP SV Flare, EP FS002, EP FS005, EP FS007, EP SV036, EP SV041, EP SV058 and EP SV060. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60, Subpart Dc Requirements

This facility is subject to Standards of Performance for *Small Industrial, Commercial, Institutional Steam Generating Units*. The affected units are EP SV13 and EP SV19. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart Dc
567 IAC 23.1(2) "III"

40 CFR 60, Subpart Db Requirements

The solid fuel boiler, SV058 is subject to NSPS 40 CFR Part 60 Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* and to the General Provisions of NSPS Subpart A. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart Db
567 IAC 23.1(2) "ccc"

40 CFR Part 60, Subpart IIII

The emission unit, SV060, Diesel Fire Pump is subject to the New Source Performance Standards (NSPS) Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* (40 CFR §60.4200 through 40 CFR §60.4219) and to NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2) "yyy". Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60, Subpart IIII
567 IAC 23.1(2) "yyy"

40 CFR 60, Subpart DD Requirements

This facility is subject to Standards of Performance for *Grain Elevators*. The affected unit is EP SV1. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart DD
567 IAC 23.1(2) "ooo"

40 CFR 60, Subpart Kb Requirements

This facility is subject to Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*. The affected units are EP SV14, EP SV15, EP SV16, EP SV17, EP SV18, and SV041. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart Kb
567 IAC 23.1(2) "ddd"

40 CFR 60 Subpart VVa Requirements

This facility is subject to Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006*. The affected units are EP SV7, EP SV9, EP SV14, EP SV15, EP SV16, EP SV17, EP SV18, EP SV Flare, EP FS002, EP FS005, EP FS007, EP SV036, and EP SV041. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart VVa
567 IAC 23.1(2) "nn"

40 CFR 63 Subpart ZZZZ Requirements

The diesel engines at this facility are subject to the National Emission Standard for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines*. The affected units are EP SV21, SV059 and SV060. Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 63 Subpart ZZZZ

See Appendix for the link to all of the Standards.

III. Emission Point-Specific Conditions

Facility Name: POET Biorefining - Emmetsburg
Permit Number: 14-TV-003R1

Emission Point ID Number: EP SV1

Associated Equipment

Associated Emission Unit ID Numbers: EU1, EU2, EU3
Emissions Control Equipment ID Number: CS1
Emissions Control Equipment Description: Pulse Jet Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit	Emission Unit Description	Raw Material/Fuel	Rated Capacity
EU1	3 Corn Receiving Pits via Truck & Rail	Corn & DDG	840 tons/hr
EU2	Elevator Headhouse & Internal Handling		NA
EU3	6 Grain Bins		2,862,000 bushels total capacity

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-219-S6
567 IAC 23.1(2) "ooo"

⁽¹⁾ If visible emissions are observed other than startup, shutdown or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-219-S6

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1 lb/hr, 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-219-S6
567 IAC 23.1(2) "ooo"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

- A. The maximum amount of corn received and processed at POET Biorefining-Emmetsburg shall not exceed 40.08 million bushels of corn per rolling 12-month period.
- B. The maximum amount of corn received at POET Biorefining-Emmetsburg shall not exceed 11,000 tons of corn per day.
- C. The facility shall only load or unload trucks with grain and DDGS with, at a minimum, the entrance door closed (i.e., three-sided enclosed building).
- D. Maintain Pulse Jet Baghouse (CS1) according to manufacturer specifications and maintenance schedule.
- E. The owner or operator is required to lock-out aeration fan during the loading of Grain Bins (EU3) and shall continue to operate the system under negative pressure (vent emissions through Pulse Jet Baghouse) for a minimum of 30 minutes after loading of Grain Bins (EU3) has been completed.
- F. The facility shall be limited to operating (i.e., unloading and loading materials) the emission unit (EU1) only between the hours of 6 AM to 11 PM daily.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Record on a monthly basis, the amount of corn received and the amount of corn processed at POET Biorefining-Emmetsburg in bushels. Calculate and record rolling 12-month totals.
- B. Record on a daily basis, the amount of corn received at POET Biorefining-Emmetsburg in applicable units.
- C. The facility shall install a high-speed entrance door that is closed when loading and/or unloading material with trucks.
- D. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Pulse Jet Baghouse (CS1).
- E. The facility shall record on a daily basis, the time the first material is loaded or unloaded and the time the last material is loaded or unloaded from the emission unit (EU1).

Authority for Requirement: DNR Construction Permit 04-A-219-S6

NSPS and NESHAP Applicability

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart DD – *Standards of Performance for Grain Elevators* as specified in 40 CFR Part 60 §60.300 and to NSPS Subpart A - *General Provisions* (40 CFR §60.1 through 40 CFR §60.19).

Authority for Requirement: DNR Construction Permit 04-A-219-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 85

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 15,000

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 04-A-219-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV2

Associated Equipment

Associated Emission Unit ID Number: EU4
Emissions Control Equipment ID Number: CE2
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU4
Emission Unit Description: Corn Scalper, Conveyor, Surge Bin
Raw Material/Fuel: Corn
Rated Capacity: 230 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-220
567 C 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.11 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-220

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.11 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-220
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications .

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 04-A-220

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 68

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 2500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical or Horizontal, Obstructed

Authority for Requirement: DNR Construction Permit 04-A-220

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV3, EP SV4, EP SV5, EP SV20

Associated Equipment

Associated Emission Unit ID Numbers: EU5, EU6, EU7, EU25

Emissions Control Equipment ID Number: CE3, CE4, CE5, CE15

Emissions Control Equipment Description: Baghouse

Continuous Emissions Monitors ID Numbers: None

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
EP-SV3	EU5	Hammermill 1	Corn	22 tons/hr
EP-SV4	EU6	Hammermill 2		
EP-SV5	EU7	Hammermill 3		
EP-SV20	EU25	Hammermill 4		

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-221-S3; 04-A-222-S1;
04-A-223-S1; 04-A-1068-S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.39 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-221-S3; 04-A-222-S1;
04-A-223-S1; 04-A-1068-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.39 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-221-S3; 04-A-222-S1;
04-A-223-S1; 04-A-1068-S1
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's instructions and specifications.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 04-A-221-S3; 04-A-222-S1;
04-A-223-S1; 04-A-1068-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 15

Stack Opening, (inches, dia.): 18" x 24"

Exhaust Flow Rate (scfm): 11,197

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 04-A-221-S3; 04-A-222-S1;
04-A-223-S1; 04-A-1068-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV6

Associated Equipment

Associated Emission Unit ID Number: EU8
Emissions Control Equipment ID Number: CE6
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU8
Emission Unit Description: Pneumatic Flour Conveyor/Receiver
Raw Material/Fuel: Flour
Rated Capacity: 74 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 04-A-224
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.19 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-224

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.19 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-224
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's instructions and specifications.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 04-A-224

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 60

Stack Opening, (inches, dia.): 12" x 12"

Exhaust Flow Rate (scfm): 4300

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical or Horizontal, Obstructed

Authority for Requirement: DNR Construction Permit 04-A-224

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV007

Associated Equipment

Associated Emission Unit ID Numbers: EU009 & EU010

Emissions Control Equipment ID Numbers: CE007

Emissions Control Equipment Description: Packed Bed Wet Scrubber

Emission Units vented through this Emission Point: EU009 & EU010

Emission Unit Description: RTO Bypass Stack: Fermenters, Beer Wells & Distillation Equipment

Raw Material/Fuel: Process Gases

Rated Capacity: See Emission Point Characteristics

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 04-A-225-S5

⁽¹⁾ An exceedence of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 04-A-225-S5

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 30.19 lbs/hr, 7.55 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-225-S5

⁽²⁾ Limit based on the operating limits found in Permit Condition 5 of DNR Construction Permit 04-A-225-S5.

Pollutant: Individual HAP

Emission Limit(s): 3.24 lbs/hr ⁽³⁾

Authority for Requirement: DNR Construction Permit 04-A-225-S5

⁽³⁾ Emission limit established in Project 18-317 and required to maintain synthetic minor status for 112(g) and/or any applicable NESHAP. The specific Individual HAP are acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately and does not represent the sum of the individual HAPs.

Pollutant: Total HAPs

Emission Limit(s): 3.40 lb/hr ⁽⁴⁾

Authority for Requirement: DNR Construction Permit 04-A-225-S5

⁽⁴⁾ Emission limit required to maintain synthetic minor status for 112(g) and/or any applicable NESHAP

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS):

This facility has process units that are subject to NSPS Subpart VV – *Standard of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*. However, the facility has chosen to comply with the provisions of NSPS subpart VVa (40 CFR Part 60 §60.480a) to satisfy the requirements of NSPS Subpart VV. The facility is also subject to Subpart A (*General Provisions*).

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. These emission units may bypass the regenerative thermal oxidizer (CE011) and vent to this emission point, SV007, a maximum of 500 hours in any rolling twelve (12) month period.
 - i. The owner or operator shall record the amount of time these units are operated without being vented to the regenerative thermal oxidizer and vent to emission point, SV007, each month.
 - ii. The owner or operator shall calculate and record the twelve month rolling total number of hours emissions are vented to emission point, SV007, on a monthly basis.
- B. The Fermentation Scrubber (CE007) shall have a minimum scrubber liquid (water) flow rate which is calculated as 90 percent of the average liquid flow rate at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations, based on a 3-hour averaging period.
 - i. The owner or operator shall record the scrubber liquid (water) flow rate on a continuous basis and calculate and record the average liquid flow rate based on a 3-hour average.
 - ii. If the flow rate deviates below 90% of lowest average liquid flow rate observed during the most recent performance test demonstrating compliance, record the time, date and actions taken to correct the situation and also when the parameter is back above the average flow rate.
 - iii. These requirements shall not apply on days that the scrubber or the equipment the scrubber controls is not in operation.
- C. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubber shall be added at a rate greater than or equal to the average rate

recorded during the most recent performance test that demonstrated compliance with all applicable emission limitations, based on a 3-hour average.

- i. The owner or operator shall record the additive feed rate on a continuous basis. The owner or operator shall calculate and record the average additive feed rate based on a 3-hour average.
- ii. If the additive feed rate deviates below the lowest average additive feed rate observed during the most recent performance test demonstrating compliance, record the time, date and actions taken to correct the situation and also when the parameter is back above the average additive feed rate.
- iii. These requirements shall not apply on days that the scrubber or the equipment the scrubber controls is not in operation.

D. If a chiller is used to cool the scrubber liquid (water) during a compliance test to enhance the efficiency of the scrubber the temperature of the water shall not be greater than 5°F above the average temperature recorded during a previous performance test that demonstrated compliance with all applicable emission limitations, based on a 3-hour average.

- i. The owner or operator shall collect and record the water temperature, at a minimum of every 15 minutes. The owner or operator shall calculate and record the average water temperature based on a 3-hour average.
- ii. If the scrubbing water temperature exceeds the water temperature observed during the most recent performance test demonstrating compliance by more than 5°F, record the time, date and actions taken to correct the situation and also when the parameter is less than 5°F above the average water temperature.
- iii. These requirements shall not apply on days that the scrubber or the equipment the scrubber controls is not in operation.

E. Maintain onsite a copy of the previous performance tests for each scrubber operating scenario detailing scrubber pressure drop, scrubber liquid flow rate, and additive feed rate measured during each performance test, which demonstrated compliance with the emission limits of Permit Condition 1 of DNR Construction Permit 04-A-225-S5.

F. Per 567 IAC 33.3(18)“f”(1), prior to beginning actual construction of the project (Project Number 17-031) the owner or operator shall document and maintain a record of the following:

- i. A description of the project (Project Number 17-031),
- ii. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 17-031), and
- iii. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph “3” of the definition of “*projected actual emissions*” in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

G. Per 567 IAC 33.3(18)“f”(4), the owner or operator shall document and maintain a record

of the following:

- i. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition 5.I.ii of DNR Construction Permit 04-A-225-S5.
 - ii. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
 - a) Per 567 IAC 33.3(18)"f"(5), the owner or operator shall retain a written record containing the information required in Condition 5.J. of DNR Construction Permit 04-A-225-S5 for a period of ten (10) years after the project (Project Number 12-464) is completed.
- H. Per 567 IAC 33.3(18)"f"(7), the owner or operator shall submit a report to the department if the annual emissions, in tons per year, from the project identified in subparagraph (1), exceed the baseline actual emissions, as documented and maintained pursuant to subparagraph (4), by an amount that is "significant" as defined in subrule 33.3(1) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to subparagraph (4). Such report shall be submitted to the department within 60 days after the end of such year. The report shall contain the following:
- i. The name, address and telephone number of the major stationary source;
 - ii. The annual emissions as calculated pursuant to subparagraph (4); and
 - iii. Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- I. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).
- J. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.
- K. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 04-A-225-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

The following equipment vents emissions to the Packed Bed Scrubber (CE007). Ultimately, these emissions are released through stack SV007:

Emission Unit	Maximum Capacity
6 Fermenters (EU009)	570,000 gallons each
2 Beerwells (EU009)	685,000 gallons each
5 Centrifuges (EU014 – EU018)	50 tons/hour
Distillation Equipment (EU010) (Evaporator, Stripper, Rectifier, Surge Tank Side Stripper, & 3 Molecular Sieves	NA

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	68
Discharge Style	Vertical, Unobstructed
Stack Outlet Dimensions (inches)	24
Exhaust Temperature (°F)	62
Exhaust Flowrate (scfm)	7,849

Authority for Requirement: DNR Construction Permit 04-A-225-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV009

Associated Equipment

Associated Emission Unit ID Numbers: EU009, EU010, EU011, EU012, EU013, EU014, EU015, EU016, EU017, EU018 & EU019

Emissions Control Equipment ID Numbers: CE007, CE009, CE010, CE011, CE012

Emissions Control Equipment Description: Packed Bed Wet Scrubber, Regenerative Thermal Oxidizer (RTO) & Multi-Cyclones (3)

Emission Units vented through this Emission Point: EU009, EU010, EU011, EU012, EU013, EU014, EU015, EU016, EU017, EU018 & EU019

Emission Unit Description: RTO Stack: Fermenters, Beer Wells, Centrifuges, Distillation Equipment, Grain Dryers & Fluid Bed Cooler

Raw Material/Fuel: Process Gases

Rated Capacity: See below

Emission Unit ID Number	Emissions Control Equipment ID Number	Emissions Control Equipment Description
EU009	CE007, CE011	Packed Bed Wet Scrubber Regenerative Thermal Oxidizer
EU010		
EU011	CE009, CE011	Multi-cyclone Regenerative Thermal Oxidizer
EU012	CE010, CE011	Multi-cyclone Regenerative Thermal Oxidizer
EU013	CE011	Regenerative Thermal Oxidizer (30 MMBtu/hr)
EU014, EU015 EU016, EU017 EU018	CE007, CE011	Packed Bed Wet Scrubber Regenerative Thermal Oxidizer
EU019	CE011, CE012	Regenerative Thermal Oxidizer Fabric Filter Baghouse

Emission Unit Vented Through This Emission Point ⁽¹⁾	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU-009	6 Fermenters, 2 Beer Wells	Beer	Fermenters: 570,000 gallons each; Beer Wells: 685,000 gallons each
EU-010	Distillation Equipment	Beer	NA
EU-011	DDGS Dryer #1	DDGS	23 tons/hr; 60 MMBtu/hr burner
EU-012	DDGS Dryer #2	DDGS	23 tons/hr; 60 MMBtu/hr burner
EU-013	RTO/HRSG	Process Gases	30 MMBtu/hr; 4015 MMscf/yr
EU-014	Centrifuge #1	Whole Stillage	50 tons/hr
EU-015	Centrifuge #2	Whole Stillage	50 tons/hr
EU-016	Centrifuge #3	Whole Stillage	50 tons/hr
EU-017	Centrifuge #4	Whole Stillage	50 tons/hr
EU-018	Centrifuge #5	Whole Stillage	50 tons/hr
EU-019	DDGS Fluid Bed Cooler	DDG	NA

⁽¹⁾ The listed equipment vents emissions to the RTO (CE011), directly or indirectly. Ultimately, these emissions are released through stack SV009

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Emission Limits (w/the affected emission units venting through the scrubber, CE007)

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-227-S7
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedence of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 19.63 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Particulate Matter (PM)
Emission Limit(s): 19.63 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-227-S7
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.81 lb/hr, 500 ppmv
Authority for Requirement: DNR Construction Permit 04-A-227-S7
567 IAC 23.3(3) "e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 12.26 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13.0 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 18.00 lb/hr, 242.0 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 04-A-227-S7
⁽²⁾ Plant-wide limit on CO to keep the facility a synthetic minor for PSD. This limit applies only to those units capable (i.e., permitted) of firing on biogas and is based on the operating limits found in the operating limits.

Pollutant: Individual HAP
Emission Limit(s): 0.54 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Total HAP
Emission Limit(s): 1.03 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-227-S7

Emission Limits (w/the affected emission units bypassing the scrubber, CE007)

Pollutant: Opacity
Emission Limit(s): 40% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 04-A-227-S7
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedence of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 19.63 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Particulate Matter (PM)
Emission Limit(s): 19.63 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-227-S7
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 1.81 lb/hr, 500 ppmv

Authority for Requirement: DNR Construction Permit 04-A-227-S7
567 IAC 23.3(3) "e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 12.26 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 37.87 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 24.81 lb/hr, 242.0 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-227-S7

⁽²⁾ Plant-wide limit on CO to keep the facility a synthetic minor for PSD. This limit applies only to those units capable (i.e., permitted) of firing on biogas and is based on the operating limits of Permit Condition 5 of DNR Construction Permit 04-A-227-S7.

Pollutant: Individual HAP

Emission Limit(s): 0.54 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Pollutant: Total HAP

Emission Limit(s): 1.34 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

New Source Performance Standards (NSPS):

This facility has process units that are subject to NSPS Subpart VV – *Standard of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*. However, the facility has chosen to comply with the provisions of NSPS subpart VVa (40 CFR Part 60 §60.480a) to satisfy the requirements of NSPS Subpart VV. The facility is also subject to Subpart A (*General Provisions*).

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

- A. The dryers and thermal oxidizer shall combust only natural gas, process off-gases, or biogas.
 - i. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day. The amount of biogas consumed by Boiler #1 (EU022), Boiler #2 (EU023), DDGS Dryers (EU011 and EU012), and RTO (CE011) shall not exceed 4015 MMscf per rolling 12 month period.
 - i. During first twelve (12) months of biogas production, determine monthly the total amount of biogas consumed by Boiler #1 (EU022), Boiler #2 (EU023), DDGS Dryers (EU011 and EU012), and RTO (CE011). After the first twelve (12) months of operation, determine the 12 month rolling total amount of biogas consumed Boiler #1 (EU022), Boiler #2 (EU023), DDGS Dryers (EU011 and EU012), and RTO (CE011).
 - ii. The facility shall calculate and record the total amount of biogas combusted by Boiler #1 (EU022), Boiler #2 (EU023), DDGS Dryers (EU011 and EU012), and RTO (CE011) per month. The facility shall monthly update and record the 12-month rolling total amount of biogas combusted by Boiler #1 (EU022), Boiler #2 (EU023), DDGS Dryers (EU011 and EU012), and RTO (CE011).
- B. The thermal oxidizer shall maintain a temperature (3 hour average) during operation of within +/-50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the most recent performance test which demonstrated compliance with the emission limits, and shall be operated at all times the equipment is being used.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the RTO. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
 - ii. The owner or operator shall keep hourly records of the operating temperature of the thermal oxidizer, and record all three hour periods (during actual operation) during which the average temperature of the oxidizer is more or less than 50 degrees Fahrenheit of the average temperature of the oxidizer during a previous performance test which demonstrated compliance with the emission limits.
 - iii. This requirement shall not apply on the days the RTO, or the equipment the RTO control, are not in operation.
- C. The Fermentation Scrubber (CE007) shall have a minimum scrubber liquid (water) flow rate which is calculated as 90 percent of the average liquid flow rate at the inlet to the wet scrubber measured during a previous performance test demonstrating compliance with all

applicable emission limitations, based on a 3-hour averaging period.

- i. The owner or operator shall record the scrubber liquid (water) flow rate on a continuous basis and calculate and record the average liquid flow rate based on a 3-hour average.
- ii. If the flow rate deviates below 90% of lowest average liquid flow rate observed during the most recent performance test demonstrating compliance, record the time, date and actions taken to correct the situation and also when the parameter is back above the average flow rate.
- iii. These requirements shall not apply on days that the scrubber or the equipment the scrubber controls is not in operation.

D. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubber shall be added at a rate greater than or equal to the average rate recorded during a previous performance test that demonstrated compliance with all applicable emission limitations, based on a 3-hour average.

- i. The owner or operator shall record the additive feed rate on a continuous basis. The owner or operator shall calculate and record the average additive feed rate based on a 3-hour average.
- ii. If the additive feed rate deviates below the lowest average additive feed rate observed during the most recent performance test demonstrating compliance, record the time, date and actions taken to correct the situation and also when the parameter is back above the average additive feed rate.
- iii. These requirements shall not apply on days that the scrubber or the equipment the scrubber controls is not in operation.

E. If a chiller is used to cool the scrubber liquid (water) during a compliance test to enhance the efficiency of the scrubber the temperature of the water shall not be greater than 5°F above the average temperature recorded during a previous performance test that demonstrated compliance with all applicable emission limitations, based on a 3-hour average.

- i. The owner or operator shall collect and record the water temperature, at a minimum of every 15 minutes. The owner or operator shall calculate and record the average water temperature based on a 3-hour average.
- ii. If the scrubbing water temperature exceeds the water temperature observed during the most recent performance test demonstrating compliance by more than 5°F, record the time, date and actions taken to correct the situation and also when the parameter is less 5° F above the average water temperature.
- iii. These requirements shall not apply on days that the scrubber or the equipment the scrubber controls is not in operation.

F. For those emission units that vent through the scrubber, the exhaust from these emission units may be bypassed around the scrubber (CE007) and vented directly to the RTO (CE011) for a maximum of 100 hours per twelve-month rolling period.

- i. The owner or operator shall monthly record the number of hours the applicable emission units are operated without being controlled by the scrubber (CE007) and vented directly through the RTO (CE011). Calculate and record rolling 12-month

totals.

- G. Maintain onsite a copy of the previous performance tests for each scrubber operating scenario detailing scrubber pressure drop, scrubber liquid flow rate, and additive feed rate measured during each performance test, which demonstrated compliance with the emission limits of Permit Condition 1 of DNR Construction Permit 04-A-227-S7.
- H. The owner or operator shall keep record of the frequency and amount of time the thermal oxidizer malfunctions and estimate the emission emitted during said malfunctions.
- I. Per 567 IAC 33.3(18)“f”(1), prior to beginning actual construction of the project (Project Number 17-031) the owner or operator shall document and maintain a record of the following:
 - i. A description of the project (Project Number 17-031),
 - ii. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 17-031), and
 - iii. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph “3” of the definition of “*projected actual emissions*” in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- J. Per 567 IAC 33.3(18)“f”(4), the owner or operator shall document and maintain a record of the following:
 - i. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition 5.J.ii of DNR Construction Permit 04-A-227-S7.
 - ii. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
 - b) Per 567 IAC 33.3(18)“f”(5), the owner or operator shall retain a written record containing the information required in Condition 5.K of DNR Construction Permit 04-A-227-S7. of this permit for a period of ten (10) years after the project (Project Number 17-031) is completed.
- K. Per 567 IAC 33.3(18)“f”(7), the owner or operator shall submit a report to the department if the annual emissions, in tons per year, from the project identified in subparagraph (1), exceed the baseline actual emissions, as documented and maintained pursuant to subparagraph (4), by an amount that is “significant” as defined in subrule 33.3(1) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to subparagraph (4). Such report shall be submitted to the department within 60 days after the end of such year. The report shall contain the following:
 - i. The name, address and telephone number of the major stationary source;
 - ii. The annual emissions as calculated pursuant to subparagraph (4); and

- iii. Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- L. Per 567 IAC 33.3(18)“g”, the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)“f” available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).
- M. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.
- N. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
 - v. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - vi. Any issues identified during the inspection and the date each issue was resolved;
 - vii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - viii. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 04-A-227-S7

Emission Point Characteristics

The following equipment vents emissions to the RTO (CE011), directly or indirectly. Ultimately, these emissions are released through stack SV009:

Emission Unit	Maximum Capacity	Control Equipment
6 Fermenters (EU009)	570,000 gallons each	Packed Bed Wet Scrubber (CE007)
2 Beerwells (EU009)	685,000 gallons each	
5 Centrifuges (EU014 – EU018)	50 tons/hour	
Distillation Equipment (EU010)	NA	
Distiller’s Grain Dryer #1 (EU011)	23 tons/hour (60 MMBtu/hr)	Multi-Cyclone (CE009)
Distiller’s Grain Dryer #2 (EU012)	23 tons/hour (60 MMBtu/hr)	Multi-Cyclone (CE010)
DDGS Fluid Bed Cooler (EU019)	NA	Multi-Cyclone (CE012)

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 100

Stack Opening, (inches, dia.): 76

Exhaust Flow Rate (scfm): 61,850

Exhaust Temperature (°F): 349

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 04-A-227-S7

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Stack Test	Initial ⁽¹⁾ and Once every 3 years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202
PM ₁₀	Stack Test	Initial ⁽¹⁾ and Once every 3 years ⁽²⁾	1 hour	40 CFR 51, Appendix M, Method 201A with 202
NO _x	Stack Test	Initial ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	Stack Test	Initial ⁽¹⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Single HAP ⁽⁴⁾	Stack Test	Once every 3 years ⁽³⁾	1 hour	According to IDNR approved method
Total HAP	Stack Test	Once every 3 years ⁽³⁾	1 hour	According to IDNR approved method

⁽¹⁾ The specified initial stack test shall be performed no later than June, July, or August of 2019.

⁽²⁾ Stack testing shall be conducted once every three years with a minimum of six (6) months between testing. If a stack test exceeds 90% of appropriate emission limitation, then testing shall revert to annual until four (4) consecutive tests are less than 90% of the appropriate emissions limitation. After completion of the initial stack test, the next reoccurring stack test shall be completed no later than June, July, or August of 2022.

⁽³⁾ Stack testing shall be conducted once every three years with a minimum of six (6) months between testing. If a stack test exceeds 90% of appropriate emission limitation, then testing shall revert to annual until four (4) consecutive tests are less than 90% of the appropriate emissions limitation. The next stack test shall be completed no later than June, July, or August of 2022.

⁽⁴⁾ Acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically. With the exception of acrolein, acetaldehyde, formaldehyde and methanol, any HAP whose emissions are below the detection limit shall be assumed to be zero.

Stack testing to be completed by (if not previously specified):

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV010

Associated Equipment

Associated Emission Unit ID Number: EU19
Emissions Control Equipment ID Number: CE012
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU019
Emission Unit Description: DDG Fluid Bed Cooler
Raw Material/Fuel: DDG
Rated Capacity: 23 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 04-A-228-S3
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 1.02 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-228-S3

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.02 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-228-S3
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.05 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-228-S3

Pollutant: Single HAP
Emission Limit(s): 1.02 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 04-A-228-S3

Pollutant: Total HAPs

Emission Limit(s): 1.68 lb/hr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-228-S3

⁽²⁾ Emission limit required to maintain synthetic minor status for 112(g) and/or any applicable NESHAP. The specific Individual HAP are primarily acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate, inspect and maintain the control equipment associated with the process according to the manufacturer's specifications. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE012. This log shall include, but is not limited to:
 - (1) The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - (2) Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
 - (3) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.
- B. The DDG Fluid Bed Cooler shall exhaust to a fabric filter baghouse. The DDGS Cooler may bypass the DDGS dryers (EU 11 and EU 12) and, subsequently, the regenerative thermal oxidizer (CE011) and vent to this emission point, SV10, for a maximum of 2000 hours in any rolling twelve (12) month period.
 - (1) The owner or operator shall record the amount of time the DDGS Cooler is vented to this emission point, SV10, each month.
 - (2) The owner or operator shall calculate and record the twelve month rolling total number of hours emissions are vented to the emission point, SV10, on a monthly basis.

Authority for Requirement: DNR Construction Permit 04-A-228-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 70

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 22,150

Exhaust Temperature (°F): 100

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 04-A-228-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC ⁽²⁾	Stack Testing	See Footnote ⁽¹⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Single HAP ⁽³⁾	Stack Testing	See Footnote ⁽¹⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Total HAPs	Stack Testing	See Footnote ⁽¹⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾ Initial stack testing shall be conducted in a manner to verify compliance with all emission limitations with all equipment operating in a worst case scenario. Stack testing shall be required after emissions have been vented through this emission point for 500 hours. The facility is allowed to test this emission source prior to venting for 500 hours to demonstrate initial compliance.

⁽²⁾ VOC compliance testing may be determined using the sum of the Method 320 or Method 18 results.

⁽³⁾ Acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically. With the exception of acrolein, acetaldehyde, formaldehyde and methanol, any HAP whose emissions are below the detection limit shall be assumed to be zero.

Stack testing to be completed by (if not previously specified):

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV11

Associated Equipment

Associated Emission Unit ID Numbers: EU20
Emissions Control Equipment ID Number: CE13
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU20
Emission Unit Description: DDGS Storage Silo
Raw Material/Fuel: DDGS
Rated Capacity: 23 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 04-A-229
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-229

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.17 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-229
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 04-A-229

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 114

Stack Opening, (inches, dia.): 16 x 16

Exhaust Flow Rate (scfm): 4000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical or Horizontal, Obstructed

Authority for Requirement: DNR Construction Permit 04-A-229

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV12

Associated Equipment

Associated Emission Unit ID Numbers: EU21
Emissions Control Equipment ID Number: CE14
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU21
Emission Unit Description: DDGS Storage Silo Bypass
Raw Material/Fuel: DDGS
Rated Capacity: 23 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-230-S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-230-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.17 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-230-S1
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 04-A-230-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 16 x 16

Exhaust Flow Rate (scfm): 4,949

Exhaust Temperature (°F): 94

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 04-A-230-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP SV13, EP SV19

Associated Equipment

Associated Emission Unit ID Numbers: EU22, EU23

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Low NO_x Burner

Continuous Emissions Monitors ID Numbers: None

Emission Point	Emission Unit	Emission Unit Description	Raw Material/Fuel	Rated Capacity
EP SV13	EU22	Boiler #1	Natural Gas or Biogas	100 MMBtu/hr (each)
EP SV19	EU23	Boiler #2		

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedence of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.09 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.09 lb/hr, 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 1.21 lb/hr, 500 ppmv

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 7.14 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.79 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 5.71 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

Pollutant: Total HAP

Emission Limit(s): 0.27 lb/hr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

⁽²⁾ Emission limit required to maintain area source status for 112(g) and/or any applicable NESHAP.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate, inspect and maintain the boiler, Boiler #1, according to the manufacturer's specifications. The facility shall maintain a log of all maintenance and inspection activities performed on the emission unit. This log shall include, but is not limited to:
 - i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
 - iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.
- B. This emission unit (Boiler #1) shall combust only natural gas and/or biogas.
 - i. As specified in 40 CFR Part 60 §60.48c(g), the owner or operator of this emission unit, Boiler #1, shall record and maintain records of the fuels combusted during each operating day.
 - ii. As specified in 40 CFR Part 60.48c(f), the owner or operator of this emission unit, Boiler #1, shall retain fuel supplier certification of the sulfur content or determine the sulfur content of fuels fired in this unit.
- C. The amount of biogas consumed by Boiler #1 (EU22), Boiler #2 (EU23), DDGS Dryers (EU11 and EU12), and RTO (CS11) shall not exceed 4,015 MMscf per rolling 12 month period.

- i. The owner or operator shall determine the annual amount of biogas consumed in Boiler #1 (EU22), Boiler #2 (EU23), DDGS Dryers (EU11 and EU12), and RTO (CS11). The facility shall calculate and record the total amount of biogas combusted per month. The facility shall monthly update and record the 12-month rolling total amount of biogas combusted.

D. The owner or operator shall follow the applicable standards of Subpart Dc, 40 CFR 60.40c through 60.48c.

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

NSPS and NESHAP Applicability

The following subparts apply to the emission unit(s) in this permit:

Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	23.1(2)	§60.1 – §60.19
Dc	Standards of Performance for Small Industrial- Commercial Institutional Steam Generating Units	23.1(2)"III"	§60.40c – §60.48c

Authority for Requirement: DNR Construction Permit 04-A-231-S3; 04-A-1067-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

	EP SV13	EP SV19
Stack Height, (ft, from the ground)	75	75
Stack Opening, (inches, dia.)	48	48
Exhaust Flow Rate (scfm)	25,972	24,481
Exhaust Temperature (°F)	314	316
Discharge Style	Vertical, Unobstructed	Vertical, Unobstructed
Authority for Requirement	DNR Construction Permit 04-A-231-S3	DNR Construction Permit 04-A-1067-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)**Compliance Demonstration Table**

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
SO ₂	Stack Test	One-time ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 6C
NO _x	Stack Test	One-time ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 7E
CO	Stack Test	One-time ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 10

⁽¹⁾ Testing is required for this pollutant when firing on biogas. Stack testing shall be required after the facility has fired this emission unit on biogas for 2000 hours or fired 285.7 MMcf of biogas in this unit, whichever comes first.

Authority for Requirement: DNR Construction Permit 04-A-231-S3, 04-A-1067-S2

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV21

Associated Equipment

Associated Emission Unit ID Numbers: EU24

Emission Unit vented through this Emission Point: EU24

Emission Unit Description: Caterpillar Model 3508 Diesel Internal Combustion Engine

Raw Material/Fuel: Diesel

Rated Capacity: 1000 kW (1341 Bhp)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-1069

567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.46 lb/hr, 0.36 tons/yr

Authority for Requirement: DNR Construction Permit 04-A-1069

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.46 lb/hr, 0.36 tons/yr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-1069

567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 5.28 lb/hr, 1.32tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-1069

567 IAC 23.3(3)"b"

⁽²⁾ The sulfur content of the fuel oil shall not exceed 0.5 percent by weight.

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 37.84 lb/hr, 9.46 tons/yr
Authority for Requirement: DNR Construction Permit 04-A-1069

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.18 lb/hr, 0.295 tons/yr
Authority for Requirement: DNR Construction Permit 04-A-1069

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 9.78 lb/hr, 2.45 tons/yr
Authority for Requirement: DNR Construction Permit 04-A-1069

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

- A. The emissions unit is permitted to burn diesel fuel oil (No. 1 or No. 2).
- B. The sulfur content of the fuel oil burned shall not exceed 0.5 percent by weight.
- C. The emissions unit can operate a maximum of 500 hours in any rolling 12-month period.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The permittee shall perform an analysis and shall maintain records on the sulfur content and the heat content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content and the heat content of the oil received.
- B. The permittee shall keep the following monthly records:
 - i. the number of hours the engine operated; and
 - ii. the rolling 12-month of the number of hours that the engine operated.

Authority for Requirement: DNR Construction Permit 04-A-1069

NESHAP Applicability

The non-emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(iii) this non-emergency engine, located a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date⁽¹⁾:

According to 40 CFR 63.6595(a)(1), you must comply with the applicable provisions of Subpart ZZZZ no later than May 3, 2013.

Emission Standards ⁽²⁾:

According to 40 CFR 63.6603(a) and Table 2d, you must comply with the following emission standards:

1. Limit concentration of CO to 23 ppmvd or less at 15 percent O₂; or
2. Reduce CO emissions by 70 percent or more.

Operating Limits ⁽²⁾:

According to 40 CFR 63.6603(a) and Table 2b, you must comply with the following operating limits if you use an oxidation catalyst system:

1. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
2. Maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

If you do not use an oxidation catalyst system, you must comply with any operating limitations approved by the Administrator.

Fuel Requirements:

You must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 63.6604(a).

Testing and Compliance Requirements:

1. According to 40 CFR 63.6612(a), you must conduct the initial performance tests or other applicable initial compliance demonstrations in Tables 4 and 5 to subpart ZZZZ no later than 180 days after the compliance date (or October 30, 2013). (The initial performance test was completed August 28, 2013 and demonstrated compliance.)
2. You must demonstrate initial compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR 63.6630(a), (b), and (c).
3. According to 40 CFR 63.6615 and Table 3 to subpart ZZZZ, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
4. You must conduct the performance testing in accordance with 40 CFR 63.6620 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 60 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing.
5. If you elect to install a CEMS as specified in Table 5 of subpart ZZZZ, you must install, operate, and maintain the CEMS according to the requirements in 40 CFR 63.6625(a).
6. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of subpart ZZZZ, you must install, operate, and maintain the CPMS according to the requirements in 40 CFR 63.6625(b). If your engine is not equipped with a closed crankcase ventilation system, you must comply with requirements in 40 CFR 63.6625(g) for operating and maintaining the engine's crankcase ventilation system ⁽²⁾.
7. According to 40 CFR 63.6625(h) and Table 2d, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for

appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission standards apply.

8. You must demonstrate continuous compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR 63.6605, 6635, and 6640(a), (b), and (e).

Notification, Reporting, and Recordkeeping Requirements

1. You must comply with the applicable notification requirements in pursuant to 40 CFR 63.6645(a), (g), (h), and (i).
2. You must comply with the applicable reporting requirements in pursuant to 40 CFR 63.6650(a) to (f).
3. You must comply with the applicable recordkeeping requirements in pursuant to 40 CFR 63.6655(a), (b), and (d), and 40 CFR 63.6660, including keeping records for at least 5 years.

- ⁽¹⁾ In accordance with 40 CFR 63.6603(e), if your engine is certified to the Tier 3 (Tier 2 for engines > 560 kW) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under Part 63 by meeting the requirements for Tier 3 engines (Tier 2 for engines > 560 kW) in 40 CFR Part 60 Subpart III.
- ⁽²⁾ See 40 CFR 63.6603(d) for alternative standards for certain certified Tier 1 and Tier 2 engines that are required to be replaced no later than June 1, 2018. However, you must submit a notification by March 3, 2013 in accordance with 40 CFR 63.6645(i).

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 7600

Exhaust Temperature (°F): 800

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 04-A-1069

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV14

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-001

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-001

Emission Unit Description: Denaturant Storage Tank

Raw Material/Fuel: Denaturant

Rated Capacity: 126,900 gal

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.76 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-232-S1

⁽¹⁾ Calculated PTE is 0.76 tpy.

Pollutant: Single HAP

Emission Limit(s): 9.4 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-232-S1

Pollutant: Total HAP

Emission Limit(s): 24.4 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-232-S1

⁽²⁾ Plantwide limit

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.

Authority for Requirement: DNR Construction Permit 04-A-232-S1

NSPS Applicability

This storage tank is subject to the following NSPS subparts:

40 CFR 60, Subpart A – *General Provisions*

40 CFR 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

40 CFR 60, Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 04-A-232-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 25

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): NA – Vent for Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 04-A-232-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV15

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-002

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-002

Emission Unit Description: 190 Proof Storage Tank

Raw Material/Fuel: Ethanol

Rated Capacity: 180,000 gal

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.17 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-233

⁽¹⁾ Calculated PTE is 0.17 tpy.

Pollutant: Single HAP

Emission Limit(s): 9.4 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-233

Pollutant: Total HAP

Emission Limit(s): 24.4 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-233

⁽²⁾ Plantwide limit

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.

Authority for Requirement: DNR Construction Permit 04-A-233

NSPS and NESHAP Applicability

This storage tank is subject to the following NSPS subparts:

40 CFR 60, Subpart A – *General Provisions*

40 CFR 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

40 CFR 60, Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 04-A-233

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 35

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): NA - Vent

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 04-A-233

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV16

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-003

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-003

Emission Unit Description: 200 Proof Ethanol Storage Tank

Raw Material/Fuel: 200 Proof Ethanol

Rated Capacity: 180,000 gal

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.19 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-234-S2

⁽¹⁾ Calculated PTE is 0.19 tpy.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS) Applicability

This emission unit is subject to Subpart A (*General Provisions*), Subpart VVa, *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006*, and Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984* of the New Source Performance Standards (NSPS).

Authority for Requirement: DNR Construction Permit 04-A-234-S2

Operating Limits

Operating limits for this permit shall be:

- A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1) and inspect as required in 40 CFR 60.113b(a).
- B. The owner or operator shall follow the applicable standards of Subpart VVa, 40 CFR 60.480a through 40 CFR 60.489a.

C. This tank shall be used to store only 200 Proof ethanol.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.
- C. The owner or operator shall keep records for Subpart VVa as required in 40 CFR 60.486a, and reports as required in 40 CFR 60.487a.

Authority for Requirement: DNR Construction Permit 04-A-234-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): NA

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): Working & Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 04-A-234-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV17, EP18

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-004, EU TK-005

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

Emission Unit vented through this Emission Point: EU TK-004, EU TK-005

Emission Unit Description: 200 Proof Storage Tank

Raw Material/Fuel: Ethanol

Rated Capacity: 2,000,000 gal each

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.33 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 04-A-235-S1, 04-A-236-S1

⁽¹⁾ Calculated PTE is 0.33 tpy (each).

Pollutant: Single HAP

Emission Limit(s): 9.4 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-235-S1, 04-A-236-S1

Pollutant: Total HAP

Emission Limit(s): 24.4 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 04-A-235-S1, 04-A-236-S1

⁽²⁾ Plant-wide limit, to remain minor for HAPs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS and NESHAP Applicability

These storage tanks are subject to the following NSPS subparts:

40 CFR 60, Subpart A – *General Provisions*

40 CFR 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

40 CFR 60, Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 04-A-235-S1, 04-A-236-S1

Operating Limits

- A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.

Authority for Requirement: DNR Construction Permit 04-A-235-S1, 04-A-236-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 49

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): NA - Vent

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 04-A-235-S1, 04-A-236-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV22

Associated Equipment

Associated Emission Unit ID Numbers: EU014, EU015, EU016, EU017 & EU018

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU014, EU015, EU016, EU017, & EU018

Emission Unit Description: 5 Centrifuge Units (RTO Bypass)

Raw Material/Fuel: Whole Stillage

Rated Capacity: 50 tons of whole stillage/hr (per centrifuge)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 20.0 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-439-S1

Pollutant: Single HAP

Emission Limit(s): 0.29 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-439-S1

Pollutant: Total HAP

Emission Limit(s): 0.32 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-439-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The Centrifuges (EU-14 – EU018) may bypass the regenerative thermal oxidizer (CE011) and vent to this emission point, SV022, for a maximum of 500 hours in any rolling twelve (12) month period.
 - i. The owner or operator shall record the amount of time the Centrifuges are operated

- without being controlled by the RTO (i.e., vented to emission point, SV022), each month.
- ii. The owner or operator shall calculate and record the twelve month rolling total number of hours the Centrifuges are operated without being controlled by the RTO (i.e., vented to emission point, SV022), on a monthly basis.

Authority for Requirement: DNR Construction Permit 17-A-439-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 37

Stack Outlet Dimensions (inches): 10

Exhaust Flow Rate (scfm): 650

Exhaust Temperature (°F): 200

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 17-A-439-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV Flare

Associated Equipment

Associated Emission Unit ID Number: EU Flare
Emissions Control Equipment ID Number: CE Flare
Emissions Control Equipment Description: Flare

Emission Unit vented through this Emission Point: EU Flare
Emission Unit Description: Ethanol Loadout
Raw Material/Fuel: Ethanol Product (i.e., Denatured Ethanol, Undenatured Ethanol and E-85)
Rated Capacity: 30,000 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 04-A-237-S7

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.85 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 04-A-237-S7

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 27.92 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 04-A-237-S7

Pollutant: Carbon Monoxide (Single)
Emission Limit(s): 4.62 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 04-A-237-S7

Pollutant: Total HAP
Emission Limit(s): .28 tons/yr
Authority for Requirement: DNR Construction Permit 04-A-237-S7

⁽¹⁾ Smokeless Design

⁽²⁾ VOC emissions are from the combustion of the flare and the product loading losses. NO_x & CO emissions are from the combustion of the flare. Emission limits established to restrict the facility's potential to emit.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The total amount of ethanol product (i.e., denatured ethanol, undenatured ethanol and E-85) transported through the truck loading and rail loading shall not exceed 110,000,000 gallons per twelve-month rolling period. A maximum of 11,000,000 gallons of E-85 (out of the 110,000,000 gallon total) may be loaded out per twelve-month rolling period.
 - i. The owner or operator shall record the total amount of fuel ethanol product (i.e., denatured ethanol, undenatured ethanol and E-85) shipped through the truck & rail loadout per twelve-month rolling period.
 - ii. The owner or operator shall record the total amount of E-85 transported through the truck & rail loadout per twelve-month rolling period.
- B. This facility is limited to receiving denaturant only classified as natural gasoline. The natural gasoline shall have a maximum octane rating of 50 or the technical data sheet (manifest) shall specifically detail that natural gasoline does not meet the requirement of gasoline (i.e., not additized, not for end use, etc.).
 - i. The owner or operator shall maintain records of the type and octane rating of the denaturant received. Should the octane rating not be listed on the technical data sheet (TDS), the TDS shall state that natural gasoline does not meet the requirements for gasoline.
- C. The flare shall.
 - i. Be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - ii. Be operated with a flame present at all times ethanol is loaded to a truck.
 - iii. Be designed to ensure smokeless operation.
- D. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
 - i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,

- iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 04-A-237-S7

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, dia.): 4

Exhaust Flow Rate (scfm): NA - Flare

Exhaust Temperature (°F): 1500

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 04-A-237-S7

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV031

Associated Equipment

Associated Emission Unit ID Number: EU044

Emission Unit vented through this Emission Point: EU044

Emission Unit Description: Biomass Receiving Building

Raw Material/Fuel: Biomass

Rated Capacity: 180 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No Visible Emissions ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 10-A-337-S2

⁽¹⁾ An opacity of "No Visible Emissions" is established in lieu of stack testing for PM and PM₁₀. The opacity test shall be performed during loading operations; however, the limit of No Visible Emissions applies at all times.

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.35 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-337-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.66 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 10-A-337-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 51.25

Stack Opening, (inches, dia.): 55.25

Exhaust Flow Rate (scfm): 25,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-337-S2

The emission point consists of four separate exhaust fans, each with the parameters listed above.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may

vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV032

Associated Equipment

Associated Emission Unit ID Number: EU045

Emissions Control Equipment ID Number: CE027

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU045

Emission Unit Description: Biomass Shredding

Raw Material/Fuel: Biomass

Rated Capacity: 70 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 10-A-338-S4

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.54 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-338-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.54 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 10-A-338-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - Any issues identified during the inspection and the date each issue was resolved;
 - Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - Identification of the staff person performing the maintenance or inspection.

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

The following equipment are included in the biomass shredding process and vent to EP SV032:

Two Infeed Conveyors	Two Biomass Shredders	Primary Sifter & Conveyor	Secondary Sifter & Conveyor
Two Net Wrap Removers	Net Wrap Grinder	Fines Pickup EU055	Net Wrap & Fines Transfer to Boiler EU054

Stack Height, (ft, from the ground): 22

Stack Opening, (inches, dia.): 45

Exhaust Flow Rate (scfm): 34,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-338-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV034

Associated Equipment

Associated Emission Unit ID Number: EU047

Emissions Control Equipment ID Number: CE029

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU047

Emission Unit Description: Fines Transfer, Biomass Metering Bin

Raw Material/Fuel: Fines, Biomass

Rated Capacity: 70 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 10-A-340-S4

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-340-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.20 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 10-A-340-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - Any issues identified during the inspection and the date each issue was resolved;
 - Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - Identification of the staff person performing the maintenance or inspection.

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft. from the ground): 10

Stack Opening, (inches, dia.): 15

Exhaust Flow Rate (scfm): 5,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-340-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV035

Associated Equipment

Associated Emission Unit ID Number: EU048

Emission Unit vented through this Emission Point: EU048

Emission Unit Description: Biomass Washer

Raw Material/Fuel: Biomass

Rated Capacity: 770 tons/day (on a dry-basis)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 10-A-341-S5

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.06 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-341-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.06 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 10-A-341-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 100

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 1,530

Exhaust Temperature (°F): 180

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 10-A-341-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV036

Associated Equipment

Associated Emission Unit ID Number: EU050

Emissions Control Equipment ID Number: CE031, CE031B

Emissions Control Equipment Description: Packed Bed Scrubber #1 (CE031) or
Packed Bed Scrubber #2 (CE031B)

Emission Unit vented through this Emission Point: EU050

Emission Unit Description: Liberty Fermentation & Distillation Process

Raw Material/Fuel: Biomass

Rated Capacity: 2800 gallons/hour (200-proof ethanol)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 10-A-343-S7

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-343-S7

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.20 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 10-A-343-S7

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 7.0 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-343-S7

Pollutant: Single HAP

Emission Limit(s): 0.27 lb/hr ⁽²⁾

Authority for Requirement: DNR Construction Permit 10-A-343-S7

Pollutant: Total HAP

Emission Limit(s): 0.50 lb/hr ⁽²⁾

Authority for Requirement: DNR Construction Permit 10-A-343-S7

⁽²⁾ Emission limit required to maintain synthetic minor status for 112(g) and/or any applicable NESHAP. The specific Individual HAP are primarily acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

This facility has process units that are subject to NSPS Subpart VV – *Standard of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*. However, the facility has chosen to comply with the provisions of NSPS subpart VVa (40 CFR Part 60 §60.480a) to satisfy the requirements of NSPS Subpart VV. The facility is also subject to Subpart A (*General Provisions*).

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. For each month of operation, the facility shall operate the scrubber controlling emissions according to the parameters (scrubber liquid flow rate, additive feed rate and scrubbing liquid temperature) that it established during the seasonal performance testing required in Permit Condition 2 of DNR Construction Permit 10-A-343-S7 to demonstrate compliance with the permitted emission limits of Permit Condition 1 of DNR Construction Permit 10-A-343-S7.

Permitted Monthly Scrubber Operating Parameters as Allowed by Season Tested

Season Tested	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Summer (testing shall be conducted in June, July or August)	X	X	X	X	X	X	X	X	X	X	X	X
Winter (testing allowed in any month from October through April)	X	X	X	X						X	X	X

- B. The scrubber controlling emissions shall have a minimum scrubber liquid flow rate that is at least 90% of the average liquid flow rate, at the inlet to the wet scrubber, as measured during the most recent performance test for the applicable calendar month that demonstrated compliance with all applicable emission limits. The average liquid flow rate shall be based on a 3-hour block averaging period.

- i. The owner or operator shall record the scrubber liquid (water) flow rate on a continuous basis.
 - ii. The owner or operator shall calculate and record the liquid flow rate based on a 3-hour block average.
 - iii. If the flow rate deviates below the minimum flow rate required (i.e., 90% of the average liquid flow rate observed during the applicable seasonal performance test), then the facility shall record the time, date and actions taken to correct the situation and when the flow rate is back above the minimum flow rate required.
 - iv. The facility shall record the permitted scrubbing liquid flow rate it is utilizing for each month as determined during the most recent seasonal performance test that it is using to demonstrate compliance.
- C. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubber shall be added, for that month, at a rate greater than or equal to the rate recorded during the applicable seasonal operating performance test that demonstrated compliance with all applicable emission limitations. The additive feed rate shall be based on a 3-hour block averaging period.
- i. The owner or operator shall record the rate of additive added (additive feed rate) to the scrubber liquid on a continuous basis.
 - ii. The owner or operator shall calculate and record the additive rate based on a 3-hour block average.
 - iii. If the additive feed rate deviates below the feed rate required (i.e., average additive feed rate observed during the applicable seasonal performance test), then the facility shall record the time, date and actions taken to correct the situation and when the additive feed rate is back above the minimum rate required.
 - iv. The facility shall record the permitted additive feed rate it is utilizing for each month as determined during the most recent seasonal performance test that it is using to demonstrate compliance.
- D. If a chiller (heat exchanger) is used to cool the scrubber liquid (water) during a compliance test to enhance the efficiency of the scrubber the temperature of the water shall not be greater than 5°F above the average temperature recorded during the applicable seasonal operating performance test that demonstrated compliance with all applicable emission limitations, based on a 3-hour block average.
- i. The owner or operator shall collect and record the water temperature, at a minimum of once every 15 minutes. The owner or operator shall calculate and record the average water temperature based on a 3-hour block average.
 - ii. If the scrubbing water temperature exceeds the water temperature observed during the most recent seasonal performance test (that demonstrated compliance) by greater than 5°F, record the time, date and actions taken to correct the situation and when the parameter is less 5°F above the permitted average water temperature for that seasonal operating scenario.
 - iii. The facility shall record the permitted scrubber liquid temperature it is utilizing for each month as determined during the most recent seasonal performance test that it is using to demonstrate compliance.
- E. The scrubber controlling emissions shall maintain an average pressure drop across the wet

scrubber that is between 0.25 and 10 inches water column based on a 24-hour averaging period. The facility shall establish an alarm setting for the purpose of initiating corrective action based on a pressure drop across the wet scrubber of less than 0.25 inches water column or a pressure drop across the wet scrubber of greater than 10 inches water column.

- i. The owner or operator shall record the scrubber pressure drop on a continuous basis.
 - ii. On those days when there is an alarm for the pressure drop reaching less than 0.25 inches water column or greater than 10 inches water column, calculate and record the average pressure drop across the scrubber based on a 24-hour average. This requirement shall not apply on the days that the scrubber is not in operation.
 - iii. If the pressure drop deviates outside the range required, then record the time, date and actions taken to correct the situation and when the pressure drop is back in the average pressure drop range required.
- F. The facility operates two Packed Bed Scrubbers, CE031 and CE031B, with only one in operation (i.e., controlling emissions) at any given time.
- i. The owner or operator shall vent emissions to either Packed Bed Scrubber #1, CE031 or Packed Bed Scrubber #2, CE031B, at all times the distillation equipment is operational, there are one or more active seed farms, there are one or more active fermenters, and/or material is being transferred into or out of one or more saccharification tanks. The requirements in Permit Conditions 5.B. – 5.E. of DNR Construction Permit 10-A-343-S7 shall not apply on days that the equipment the scrubber controls is not in operation.
 - ii. The owner or operator shall record the date and time each scrubber is in operation (i.e., controlling emissions).
- G. The owner or operator shall maintain onsite a copy of the previous performance tests for the scrubbers and for each seasonal operating scenario detailing scrubber pressure drop, scrubber liquid flow rate, and additive feed rate measured during each performance test, which demonstrated compliance with Permit Condition 1 of DNR Construction Permit 10-A-343-S7.
- H. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- ix. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - x. Any issues identified during the inspection and the date each issue was resolved;
 - xi. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - xii. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 10-A-343-S7

Emission Point Characteristics

The following equipment vent emissions to one of two scrubber, Packed Bed Scrubber #1 (CE031) or Packed Bed Scrubber #2 (CE031B) directly or indirectly, and the associated emission points (SV036 or SV058, Solid Fuel Boiler):

Emission Unit	Maximum Capacity
Fermenters 1 through 5 ⁽¹⁾	783,000 gallons each
Beerwell	914,000 gallons
Slurry Tank	15,500 gallons
3 Seed Fermenters	90,000 gallons each
4 Liquefaction Tanks	90,000 gallons each
200 Proof Condenser	60 gallons/minute
190 Proof Condenser	16,000 gallons per hour
Regen Tank Vent	NA
Distillation Vacuum Vent	NA
12 Evaporators	10,000 gallons/hr (each)
3 Molecular Sieves	4,000 gallons/hr (each)
Saccharification (9 tanks)	706,000 gallons each

⁽¹⁾ Fermenter 1 can be used as either an additional liquefaction tank or traditional fermenter.

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 33

Stack Opening, (inches, dia.): 16

Exhaust Flow Rate (scfm): 8,125

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-343-S7

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC ⁽²⁾	Stack Testing ^{(1) (6)}	See Footnote ^{(4) (5)}	1 hour	40 CFR 60, Appendix A, Method 18 or 40 CFR 63, Appendix A, Method 320
Single HAP ⁽³⁾	Stack Testing ^{(1) (6)}	See Footnote ^{(4) (5)}	1 hour	
Total HAPs	Stack Testing ^{(1) (6)}	See Footnote ^{(4) (5)}	1 hour	

⁽¹⁾ Stack testing shall be conducted in a manner to verify compliance with all emission limitations with all equipment operating in a worst-case scenario. If the facility chooses to operate the scrubber using seasonal scrubber operating conditions, initial performance testing shall be conducted for each seasonal scrubber operating scenario (summer and/or winter) the facility chooses to use to demonstrate compliance with the emission limits of Permit Condition 1 of DNR Construction Permit 10-A-343-S7.

⁽²⁾ VOC compliance testing may be determined using the sum of the Method 320 or Method 18 results.

⁽³⁾ Acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically. With the exception of acrolein, acetaldehyde, formaldehyde and methanol, any HAP whose emissions are below the detection limit shall be assumed to be zero.

⁽⁴⁾ Stack testing shall be required each year emissions are vented through this emission point, SV036, for more than 1000 hours/calendar year. The facility shall conduct the required calendar year stack testing for the qualifying seasonal period covering the months of May through September (summer), as described in Permit Condition 5.A of DNR Construction Permit 10-A-343-S7. At a minimum, the facility shall conduct stack testing for the qualifying seasonal period covering the months of May through September once every 36 months. Stack testing shall be conducted during the months of June, July, or August for this period. The facility shall use the most recent test that demonstrates compliance with the permitted emission limits in Permit Condition 1 of DNR Construction Permit 10-A-343-S7 to establish the scrubber liquid flow rate, additive feed rate and, scrubbing water temperature (if a chiller is used to control scrubbing water temperature) for each month of operation, as detailed in Permit Condition 5 of DNR Construction Permit 10-A-343-S7.

⁽⁵⁾ Stack testing shall be required each year emissions are vented through this emission point, SV036, for more than 1000 hours/calendar year. The facility shall conduct the required calendar year stack testing for the qualifying seasonal period covering the months of October through April (winter), as described in Permit Condition 5.A of DNR Construction Permit 10-A-343-S7. At a minimum, the facility shall conduct stack testing for the qualifying seasonal period covering the months of October through April (winter) once every 36 months, as described in Permit Condition 5.A of DNR Construction Permit 10-A-343-S7. The facility shall use the most recent test that demonstrates compliance with the permitted emission limits in Permit Condition 1 of DNR Construction Permit 10-A-343-S7 to establish the scrubber liquid flow rate, additive feed rate and, scrubbing water temperature (if a chiller is used to control scrubbing water temperature) for each month of operation, as detailed in Permit Condition 5 of DNR Construction Permit 10-A-343-S7. If the facility opts to comply with only the operating parameters established during the June, July, or August testing, the additional winter test is not required.

⁽⁶⁾ The facility is required to test, at a minimum, one of the scrubbers (CE031 or CE031B) once every 36 months.

Stack testing to be completed by (if not previously specified):

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification

to any emission units or control equipment.

Authority for Requirement: DNR Construction Permit 10-A-343-S7

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV038

Associated Equipment

Associated Emission Unit ID Number: EU051
Emissions Control Equipment ID Number: CE033
Emissions Control Equipment Description: Flare

Emission Unit vented through this Emission Point: EU051
Emission Unit Description: Liberty Biogas Flare with Natural Gas Purge System and
Continuous Natural Gas Pilot Light
Raw Material/Fuel: Biogas and Natural Gas
Rated Capacity: 153,125 scf/hr Biogas, 243 scf/hr Natural Gas

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0% ⁽¹⁾
Authority for Requirement: 40 CFR Part 60.18
DNR Construction Permit 10-A-344-S6

⁽¹⁾ Smokeless design

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 10-A-344-S6

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.30 lb/hr, 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)
DNR Construction Permit 10-A-344-S6

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 7.30 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-344-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 15.00 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-344-S6

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 39.70 lb/hr
Authority for Requirement: DNR Construction Permit 10-A-344-S6

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The flare shall:
 - i. Be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - ii. Be operated with a flame present at all times when biogas is directed to the flare.
 - iii. Be designed to ensure smokeless operation.
- B. The amount of biogas consumed by the biogas flare shall not exceed 200 MMCF per rolling 12-month period.
 - i. The owner or operator shall record the amount of biogas combusted in this unit, EU051, each month.
 - ii. The owner or operator shall calculate and record the twelve-month rolling total amount of biogas combusted in this unit, EU051, on a monthly basis.
- C. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
 - i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 10-A-344-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 13.5

Exhaust Flow Rate (scfm): 3,350

Exhaust Temperature (°F): 1,850

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-344-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV041

Associated Equipment

Associated Emission Unit ID Number: EU TK007

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

Emission Unit vented through this Emission Point: EU TK007

Emission Unit Description: Liberty 190 Proof Ethanol Storage Tank

Raw Material/Fuel: 190 Proof Ethanol

Rated Capacity: 35,000 gallons

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.17 tpy ⁽¹⁾

Authority for Requirement: DNR Construction Permit 10-A-347-S2

⁽¹⁾ Calculated PTE is 0.17 tpy

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS)

This emission unit is subject to Subpart A (General Provisions), Subpart VVa, *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006*, and Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984* of the New Source Performance Standards (NSPS).

Operating Limits

Operating limits for this permit shall be:

- A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1) and inspect as required in 40 CFR 60.113b(a).
- B. The owner or operator shall follow the applicable standards of Subpart VVa, 40 CFR 60.480a through 40 CFR 60.489a.
- C. This tank shall be used to store only 190 Proof ethanol.

Operating Condition Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.
- C. The owner or operator shall keep records for Subpart VVa as required in 40 CFR 60.486a, and reports as required in 40 CFR 60.487a.

Authority for Requirement: DNR Construction Permit 10-A-347-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): Working & Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 10-A-347-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV043

Associated Equipment

Associated Emission Unit ID Number: EU056

Emissions Control Equipment ID Number: CE039

Emissions Control Equipment Description: Cartridge Filters

Emission Unit vented through this Emission Point: EU056

Emission Unit Description: Biomass Bunker East

Raw Material/Fuel: Biomass

Rated Capacity: 35 Tons/hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-120-S2

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.11 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-120-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.11 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 13-A-120-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 13-A-120-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 49

Stack Opening, (inches, dia.): 13

Exhaust Flow Rate (scfm): 3,200

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 13-A-120-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV044

Associated Equipment

Associated Emission Unit ID Number: EU057

Emissions Control Equipment ID Number: CE040

Emissions Control Equipment Description: Cartridge Filters

Emission Unit vented through this Emission Point: EU057

Emission Unit Description: Biomass Bunker West

Raw Material/Fuel: Biomass

Rated Capacity: 35 Tons/hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-121-S2

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.11 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-121-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.11 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 13-A-121-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 13-A-121-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 49

Stack Opening, (inches, dia.): 13

Exhaust Flow Rate (scfm): 3,200

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 13-A-121-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV045

Associated Equipment

Associated Emission Unit ID Number: EU058

Emissions Control Equipment ID Number: CE041

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU058

Emission Unit Description: Net Wrap/Twine/Stover Filter Receiver

Raw Material/Fuel: Net Wrap/Twine/Stover

Rated Capacity: 20 Tons/hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-122-S2

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.24 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-122-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.24 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 13-A-122-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

Operating limits for this emission unit shall be:

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record of all inspections of the control equipment. The owner or operator shall document the results of the inspections and note any repairs that were the result of the inspections.

Authority for Requirement: DNR Construction Permit 13-A-122-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, dia.): 15

Exhaust Flow Rate (scfm): 7,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 13-A-122-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV046

Associated Equipment

Associated Emission Unit ID Number: EU059, EU075
Emissions Control Equipment ID Number: CE042
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: EU059, EU075
Emission Unit Description: Ash Silo, Ash Grinder
Raw Material/Fuel: Ash
Rated Capacity: 20,000 ft³ (tank capacity), 30 tons/hr (grinding)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-123-S4

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.31 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-123-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.89 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-123-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 90

Stack Opening, (inches, length x width.): 18 x 10

Exhaust Flow Rate (scfm): 3,500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-123-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV047

Associated Equipment

Associated Emission Unit ID Number: EU060

Emissions Control Equipment ID Number: CE043

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU060

Emission Unit Description: Lime Silo

Raw Material/Fuel: Lime

Rated Capacity: 6,950 ft³

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-124-S2

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-124-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-124-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated

control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:

- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
- ii. Any issues identified during the inspection and the date each issue was resolved;
- iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
- iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 13-A-124-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 78

Stack Opening, (inches, diameter): 18 x 15

Exhaust Flow Rate (scfm): 475

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 13-A-124-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV048

Associated Equipment

Associated Emission Unit ID Number: EU061

Emissions Control Equipment ID Number: CE044, CE044a & CE044b

Emissions Control Equipment Description: Cartridge Filters (CE044)
Water Suppression (CE044a)
Ash/Syrup Mixer (CE044b)

Emission Unit vented through this Emission Point: EU061

Emission Unit Description: Ash Loadout

Raw Material/Fuel: Ash

Rated Capacity: 30 Tons/hr (Loadout Rate)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"
DNR Construction Permit 13-A-125-S4

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-125-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"
DNR Construction Permit 13-A-125-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. The control equipment, CE044a & CE044b, shall be operated and maintained according to the manufacturer's specification with inspections occurring at a minimum of once per calendar year.
 - A. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
 - i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
 - iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.
- B. The facility shall operate the Ash Conditioner (CE044a) or the Ash/Syrup Mixer (CE044b) at all times during ash loadout operations.
 - A. When the Ash Conditioner (CE044a) is used, the owner or operator shall add water to the ash during truck loading operations to minimize fugitive dust.
 - B. The owner or operator shall establish an ash/syrup ratio and mixing time to ensure adequate control of fugitive dust emissions, with a minimum syrup concentration of 30% syrup by weight.
 - C. The owner or operator shall record the mixing ratio (syrup weight percent) during each ash loadout batch using the Ash/Syrup Mixer (CE044b). The calculation shall include the weight of ash and the weight of syrup for each loadout batch.
 - D. The owner or operation shall record which control system (CE044a or CE044b) is used during each time the ash loadout system is operation.

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 25

Stack Opening, (inches, diameter): 8

Exhaust Flow Rate (scfm): 1,800

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-125-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV050

Associated Equipment

Associated Emission Unit ID Number: EU063 & EU076

Emissions Control Equipment ID Number: CE046

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU063 & EU076

Emission Unit Description: Bed Additive Storage Tank Vent & Bed Additive Fill Duct

Raw Material/Fuel: Bed Additive

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-127-S3

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-127-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-127-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 35

Stack Opening, (inches, length x width): 8 x 14

Exhaust Flow Rate (scfm): 500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-127-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV051

Associated Equipment

Associated Emission Unit ID Number: EU064

Emissions Control Equipment ID Number: CE047

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU064

Emission Unit Description: Sulfamic Acid Bag Unloading

Raw Material/Fuel: Sulfamic Acid Bags

Rated Capacity: 35 tons/hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-128-S2

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-128-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-128-S2

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?

Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required?

Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required?

Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV052

Associated Equipment

Associated Emission Unit ID Number: EU065

Emission Unit vented through this Emission Point: EU065

Emission Unit Description: OSM Enzyme Production

Raw Material/Fuel: Dextrose and Cellulose

Rated Capacity: 400 Gal/hr (Dextrose, Corn Slurry, and/or Cellulose)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-494-S1

Pollutant: Total HAP

Emission Limit(s): 0.11 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-494-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
 - i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 48

Stack Outlet Dimensions (inches): 32

Exhaust Flow Rate (scfm): 12,000

Exhaust Temperature (°F): 115

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 16-A-494-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV053

Associated Equipment

Associated Emission Unit ID Number: EU066

Emissions Control Equipment ID Number: CE048

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU066

Emission Unit Description: Sulfur Cake Loadout Conveyors

Raw Material/Fuel: Sulfur Cake

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-130-S2

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-130-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-130-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 38

Stack Opening, (inches, length x width): 9 x 6

Exhaust Flow Rate (scfm): 1,300

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-130-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV054

Associated Equipment

Associated Emission Unit ID Number: EU067, EU074

Emissions Control Equipment ID Number: CE049

Emissions Control Equipment Description: Cartridge Filters

Emission Unit vented through this Emission Point: EU067, EU074

Emission Unit Description: Shredded Stover Transfer Airlock and Biomass Metering Bin

Raw Material/Fuel: Shredded Stover

Rated Capacity: 20 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-131-S3

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-131-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.04 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-131-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 13-A-131-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 11

Stack Opening, (inches, diameter): 5

Exhaust Flow Rate (scfm): 250

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-131-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV055

Associated Equipment

Associated Emission Unit ID Number: EU068

Emissions Control Equipment ID Number: CE050

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU068

Emission Unit Description: Bale Core

Raw Material/Fuel: Biomass

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 13-A-132-S1

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-132-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.03 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 13-A-132-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, diameter): 4

Exhaust Flow Rate (scfm): 350

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-132-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV058

Associated Equipment

Associated Emission Unit ID Number: EU069

Emissions Control Equipment ID Number: CE034, CE035 and CE036

Emissions Control Equipment Description: Flue Gas Desulfurization (CE034)
Selective Non-Catalytic Reduction (CE035)
Pulse Jet Baghouse (CE036)

Emission Unit vented through this Emission Point: EU069

Emission Unit Description: Solid Fuel Boiler

Raw Material/Fuel: Biomass

Rated Capacity: 290 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 13-A-135-S6
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 30.24 lb/hr, 0.156 lb/MMBtu

Authority for Requirement: DNR Construction Permit 13-A-135-S6

Pollutant: Particulate Matter (PM)

Emission Limit(s): 30.24 lb/hr, 0.156 lb/MMBtu

Authority for Requirement: DNR Construction Permit 13-A-135-S6

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 51.2 lb/hr; 0.177 lb/MMBtu

Authority for Requirement: DNR Construction Permit 13-A-135-S6

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 46.7 lb/hr, 0.161 lb/MMBtu

Authority for Requirement: DNR Construction Permit 13-A-135-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 4.93 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-135-S6

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 15.0 lb/hr, 0.139 lb/MMBtu
Authority for Requirement: DNR Construction Permit 13-A-135-S6

Pollutant: Hydrogen Chloride (HCl) ⁽²⁾
Emission Limit(s): .92 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-135-S6
⁽²⁾ Emissions of hydrogen chloride (HCl) are included in the emission limit Total HAP

Pollutant: Total HAP
Emission Limit(s): 1.93 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-135-S6

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

A. New Source Performance Standards (NSPS):

The solid fuel boiler is subject to NSPS 40 CFR Part 60 Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* and to the General Provisions of NSPS Subpart A.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This equipment is subject to the following federal regulation: *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* [40 CFR Part 63, Subpart JJJJJ].

Authority for Requirement: DNR Construction Permit 13-A-135-S6

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The solid fuel boiler, EU069, shall be limited to firing on biomass (biogas, anaerobic digester sludge, ground biomass, filter cake, syrup, biomass fines, & net wrap) and natural gas (only for light off, startup, and flame stabilization).
 - i. As specified in 40 CFR Part 60 §60.49b(d), the owner or operator of an affected boiler shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period.
 - ii. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar.
- B. The baghouse, CE036, differential pressure drop shall be maintained between 0.5 and 10 inches of water column.
 - i. The owner or operator shall collect and record the pressure drop across the baghouse, in inches of water, once per calendar day. This requirement shall not apply on days that the baghouse is not in operation.
 - ii. If visible emissions are observed at any time from the baghouse or baghouse exhaust, the owner or operator shall, as soon as practicable, investigate the cause of the visible emissions and perform any corrective action that is necessary to eliminate the visible emissions.
- C. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 17-031) the owner or operator shall document and maintain a record of the following:
 - i. A description of the project (Project Number 17-031),
 - ii. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 17-031), and
 - iii. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- D. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall document and maintain a record of the following:
 - i. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition 5.C.ii of DNR Construction Permit 13-A-135-S6.
 - ii. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
 - c) Per 567 IAC 33.3(18)"f"(5), the owner or operator shall retain a written record containing the information required in Condition 5.D of DNR Construction Permit 13-A-135-S6. of this permit for a period of ten (10) years after the project (Project Number 12-464) is completed.

- E. Per 567 IAC 33.3(18)"f"(7), the owner or operator shall submit a report to the department if the annual emissions, in tons per year, from the project identified in subparagraph (1), exceed the baseline actual emissions, as documented and maintained pursuant to subparagraph (4), by an amount that is "significant" as defined in subrule 33.3(1) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to subparagraph (4). Such report shall be submitted to the department within 60 days after the end of such year. The report shall contain the following:
- i. The name, address and telephone number of the major stationary source;
 - ii. The annual emissions as calculated pursuant to subparagraph (4); and
 - iii. Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- F. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).
- G. The owner or operator shall conduct an inspection of the emission units and the associated control equipment at a minimum of once per year and correct/repair any issues discovered during the inspection. The owner or operator shall maintain a log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
- i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - iv. Identification of the staff person performing the maintenance or inspection.

Continuous Emission Monitoring

- A. *SO₂*: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) and record the output of the system, for measuring sulfur dioxide (SO₂) emissions discharged to the atmosphere.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

- B. *NO_x*: The owner or operator shall install, calibrate, maintain and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

- C. *CO*: The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring CO emissions discharged to the atmosphere and record the output of the system.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 4A (PS4A) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

- D. *Flowmeter*: The owner or operator shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 6 and 40 CFR 60, Appendix F, Procedure 1. In addition, the owner or operator shall record the output of the system, for measuring the volumetric flow of exhaust gases discharged to the atmosphere.

- E. The following data requirements shall apply to all CEMS for the emission standards in this permit:

- i. CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEM breakdowns and repairs. Data is recorded during calibration, checks, and zero and span adjustments.
- ii. The 1-hour average SO₂, NO_x, and CO emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least two data points must be used to calculate each 1-hour average.
- iii. For each hour of missing emission data (NO_x, SO₂, or CO), the owner or operator shall substitute data by:
 - 1) If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - a. For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - b. For a missing data period greater than 24 hours, substitute the greater of:
 - The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

- 2) If the monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - a. For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - b. For the missing data period of more than 8 hours, substitute the greater of:
 - The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- 3) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

F. If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

Authority for Requirement: DNR Construction Permit 13-A-135-S6

Emission Point Characteristics

The following equipment vents emissions to Solid Fuel Boiler, directly or indirectly. Ultimately, these emissions are released through stack SV058:

Emission Unit	Maximum Capacity
5 Fermenters ^{(1) (2)}	783,000 gallons each
Beerwell ⁽¹⁾	914,000 gallons
3 Seed Fermenters ⁽¹⁾	90,000 gallons each
Slurry Tank ⁽¹⁾	15,500 gallons
4 Liquefaction Tanks ⁽¹⁾	90,000 gallons each
200 Proof Condenser ⁽¹⁾	60 gallons/minute
190 Proof Condenser ⁽¹⁾	16,000 gallons per hour
Regen Tank Vent ⁽¹⁾	na
Distillation Vacuum Vent ⁽¹⁾	na
12 Evaporators ⁽¹⁾	10,000 gallons/hr (each)
3 Molecular Sieves ⁽¹⁾	4,000 gallons/hr (each)
Saccharification (9 tanks) ⁽¹⁾	706,000 gallons each
Pre-Steamer Bin	na
EQ Tank Vent	1,170,900 gallons
Conditioning Tank	582,500 gallons
Ash/Syrup Mixer (CE044b)	na
Polishing Tank 1	404,183 gallons

Polishing Tank 2	404,183 gallons
4 Tilted Plate Separators	88,900 gallons each
Influent Pump Tank	27,200 gallons
Effluent Pump Tank	31,200 gallons
Bioreactor 2	150,000 gallons
Bioreactor 2 Foam Trap	3700 gallons
Sulfur Settler 2	10,500 gallons
Bioreactor 1	150,000 gallons
Bioreactor 1 Foam Trap	3700 gallons
Sulfur Settler 1	10,500 gallons
Centrate Tank	5180
Centrifuge 1 & 2	na
Gravity Screens/Disc Mill/Overs Tank	1800 gallons
Biomass Washer	na

(1) This emission unit is vented through the Packed Bed Scrubber, CE031, prior to venting through the Solid Fuel Boiler and out the emission point, SV058.

(2) Ferm 1 can be used as either an additional liquefaction tank or a traditional fermenter.

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 125

Stack Opening, (inches, dia.): 78

Exhaust Flow Rate (scfm): 127,500

Exhaust Temperature (°F): 185

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 13-A-135-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
SO ₂	CEMS ⁽¹⁾	Continuous	1 hour	40 CFR 60, Appendix A, Method 6C
NO _x	CEMS ⁽¹⁾	Continuous	1 hour	40 CFR 60, Appendix A, Method 7E
CO	CEMS ⁽¹⁾	Continuous	1 hour	40 CFR 60, Appendix A, Method 10
HCl	Stack Testing	Every 36 Months ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 26A
THAP	Stack Testing	Every 36 Months ⁽²⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾ Compliance shall be measured continuously using a Continuous Emission Monitoring System (CEMS).

⁽²⁾ The next stack test shall be completed no later than June, July, or August of 2022.

Stack testing to be completed by (if not previously specified):

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Authority for Requirement: DNR Construction Permit 13-A-135-S6

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV059

Associated Equipment

Associated Emission Unit ID Number: EU070

Emissions Control Equipment ID Number: CE059

Emissions Control Equipment Description: Oxidation Catalyst

Emission Unit vented through this Emission Point: EU070

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 2937 Bhp

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 13-A-136-S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.17 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-136-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.94 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-136-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.15 lb/hr; 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"
DNR Construction Permit 13-A-136-S1

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 70% CO reduction or 23 ppm_{vd} CO

Authority for Requirement: 567 IAC 23.1(4)"cz" ⁽²⁾
DNR Construction Permit 13-A-136-S1

⁽²⁾ IDNR reference to National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – Subpart ZZZZ (40 CFR §63.6580 through 40 CFR §63.6650).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

This equipment is subject to the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ] and is subject to the requirements of 567 IAC 23.1(4)"cz".

Authority for Requirement: DNR Construction Permit 13-A-136-S1

Operating Limits

Operating limits for this permit shall be:

- A. This generator shall not operate more than 500 hours per rolling twelve-month period.
- B. This generator shall operate, for curtailment purposes, a maximum of 16 times per calendar year and no curtailment event shall exceed six hours in duration.
- C. Beginning October 1, 2010, diesel fuel fired in this generator shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(b).
- D. As per 40 CFR Part 63 Subpart ZZZZ, the owner or operator shall maintain the control equipment (catalyst) so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test.
- E. As per 40 CFR Part 63 Subpart ZZZZ, the owner or operator shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.
- F. Any other operating limits not listed here but are part of 40 CFR Part 63 Subpart ZZZZ shall also be maintained.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator of this generator shall install a non-resettable hour meter prior to start-up.
- B. Record each month the total hours of operation for this generator and the reason the generator was operated. Calculate and record rolling twelve-month totals.
- C. Maintain records of the sulfur content of the fuel oil utilized in this generator.
- D. The owner or operator of this generator shall install a continuous parameter monitoring system (CPMS) to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b).
- E. The owner or operator of this generator shall record the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
- F. The owner or operator of this generator shall follow the monitoring requirements of 40 CFR§63.6625.
- G. The owner or operator of this generator shall follow the notification, reporting and recordkeeping requirements of 40 CFR§63.6645, 40 CFR§63.6650 and 40 CFR§63.6655, respectively.

Authority for Requirement: DNR Construction Permit 13-A-136-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 15

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 5,740

Exhaust Temperature (°F): 752

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 13-A-136-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Demonstration	Compliance Methodology	Frequency	Test Method
CO ⁽¹⁾	Yes	Stack Testing	Every 3 years	40 CFR 60, Appendix A, Method 10

⁽¹⁾ Stack testing shall demonstrate compliance with either 70% CO reduction or an outlet concentration of 23 ppm_{vd} CO at 15% O₂. Should the facility choose to demonstrate compliance with the percent CO reduction, it shall measure CO and O₂ at the inlet and outlet of the control device.

Authority for Requirement: DNR Construction Permit 13-A-136-S1

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV060

Associated Equipment

Associated Emission Unit ID Number: EU071

Emission Unit vented through this Emission Point: EU071

Emission Unit Description: Diesel Fire Pump

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 575 BHp

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 13-A-137-S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM) for NSPS 40 CFR Part 60 Subpart IIII

Emission Limit(s): 0.20 g/kW-hr

Authority for Requirement: 567 IAC 23.1(2)"yyy" ⁽²⁾
DNR Construction Permit 13-A-137-S1

Pollutant: NMHC + NO_x for NSPS 40 CFR Part 60 Subpart IIII ⁽³⁾

Emission Limit(s): 4.0 g/kW-hr

Authority for Requirement: 567 IAC 23.1(2)"yyy" ⁽²⁾
DNR Construction Permit 13-A-137-S1

⁽³⁾ NMHC is defined as Non-methane Hydrocarbons; NO_x is for Oxides of Nitrogen.

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3) "b"
DNR Construction Permit 13-A-137-S1

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.5 g/kW-hr

Authority for Requirement: 567 IAC 23.1(2)"yyy" ⁽²⁾

DNR Construction Permit 13-A-137-S1

⁽²⁾ IDNR reference to New Source Performance Standards (NSPS) Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR §60.4200 through 40 CFR §60.4219).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR §60.4200 through 40 CFR §60.4219) and to NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy".

Authority for Requirement: DNR Construction Permit 13-A-137-S1

NESHAP:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(iii) this emergency engine, located at an area source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(1), a new stationary RICE located at an area source of HAP emissions must meet the requirements of Part 63 by meeting the requirements of 40 CFR part 60 subpart IIII for compression ignition engines (or 40 CFR part 60 subpart JJJJ for spark ignition engines). No further requirements apply for this engine under Part 63.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

For emergency (Fire Pump) CI engines with Disp. < 30 l/cyl constructed after 7/11/2005 and manufactured after 7/1/2006:

Emission Standards:

According to 40 CFR 60.4205(c) and Table 4 to Subpart IIII, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NMHC + NO_x	CO	PM
130 ≤ kW ≤ 560 (175 ≤ HP ≤ 750)	2009+	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)

Fuel Requirements (if using diesel):

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 80.510(b).

Compliance Requirements:

1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
 - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
 - b) Changing only those emission-related settings that are permitted by the manufacturer; and
 - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.

Maximum Engine Power	Model Year
kW < 75 (HP < 100)	2011
75 ≤ kW < 130 (100 ≤ HP < 175)	2010
130 ≤ kW ≤ 560 (175 ≤ HP ≤ 750)	2009
560 < kW (750 ≤ HP)	2008

2. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with

good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
500 < HP	Within 1 year of engine startup, or non-permitted action ⁽¹⁾	Every 8,760 hours or 3 years, whichever comes first

⁽¹⁾ Non-permitted action means that you do not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer.

Operating and Recordkeeping Requirements

1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 40.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 40.4214(b).

Engine power	Starting model year
$19 \leq \text{KW} < 56$ ($25 \leq \text{HP} < 75$)	2013
$56 \leq \text{KW} < 130$ ($75 \leq \text{HP} < 175$)	2012
$130 \leq \text{KW}$ ($175 \leq \text{HP}$)	2011

2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Operating Requirements and Associated Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. This generator shall not operate more than 300 hours per rolling twelve-month period.
 - v. The owner or operator shall record each month the total hours of operation for this generator and the reason the generator was operated. Calculate and record the rolling twelve-month total hours operated.
- B. Per 40 CFR§60.4211(f), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
 - i. The owner or operator of this generator shall follow the monitoring requirements of 40 CFR§60.4209 (i.e., installation of a non-resettable hour meter prior to start-up or meet the standards applicable to non-emergency engines).
- C. Beginning October 1, 2010, diesel fuel fired in this generator shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(b).
 - i. Maintain records of the sulfur content of the fuel oil utilized in this generator.
- D. The owner or operator of this generator shall follow the monitoring requirements of 40 CFR§60.4209 (i.e., installation of a non-resettable hour meter prior to start-up or meet the standards applicable to non-emergency engines).
- E. The owner or operator of this generator shall follow the compliance requirements of 40 CFR§60.4211.
- F. The owner or operator of this generator shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

Authority for Requirement: DNR Construction Permit 13-A-137-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 8

Stack Opening, (inches, dia.): 3

Exhaust Flow Rate (scfm): 2,800

Exhaust Temperature (°F): 865

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 13-A-137-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV062

Associated Equipment

Associated Emission Unit ID Number: EU073

Emissions Control Equipment ID Number: CE062

Emissions Control Equipment Description: Air Vent Filter

Emission Unit vented through this Emission Point: EU073

Emission Unit Description: Bed Additive Storage Tank #2

Raw Material/Fuel: Bed Additive

Rated Capacity: 0.25 Tons/hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "d"

DNR Construction Permit 16-A-014-S1

⁽¹⁾ An exceedance of the indicator opacity of "25%" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

DNR Construction Permit 16-A-014-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The control equipment, CE062, shall be operated and maintained according to the manufacturer's specification with inspections occurring at a minimum of once per calendar year.
 - i. The facility shall maintain a log of all maintenance and inspection activities

performed on the control equipment, Air Vent Filter. This log shall include, but is not limited to:

- (1) The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
- (2) Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
- (3) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 16-A-014-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 42.8

Stack Opening, (inches): 10 x 20

Exhaust Flow Rate (scfm): 1,240

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 16-A-014-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP FS002, EP FS005 & EP FS007

Associated Equipment

Associated Emission Unit ID Number: EU FS002, EU FS005 & EU FS007

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Leak Detection and Repair (LDAR)

Emission Unit vented through this Emission Point: EU FS002, EU FS005 & EU FS007

Emission Unit Description: Fugitive Equipment Leaks & Tank Farm Fugitives

Raw Material/Fuel: VOC

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 12.02 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-863-S4

⁽¹⁾ Limit established to restrict potential emissions below the applicable PSD "major source" threshold. This is a plant-wide limit for equipment leaks.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS):

The following subparts apply to the emission units EU FS002, EU FS005 and EU FS007:

Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	23.1(2)	§60.1 – §60.19
VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	23.1(2)"nn"	§60.480a – §60.489a

Authority for Requirement: 567 IAC 23.1(2)

567 IAC 23.1(2)"nn"

DNR Construction Permit 05-A-863-S4

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The component count shall be documented as to the number and types of all components used including vacuums service components. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. All components shall be tested initially including those in vacuum; there is no de minimus level.
- B. The owner or operator shall follow the applicable standard of Subpart VVa, 40 CFR 60.480a through 60.489a.
- C. All emission shall be recorded except those below detection limits.
- D. This facility shall be divided into three sections, which are defined as the fermentation process, the distillation process, and the tank farm. For each of these sections, the following shall be completed:
 - i. Determine the component count for each section. This count shall be updated with each modification to that section of the facility.
 - ii. From each month leak detection tracking information determine the following for each component type:
 - (1) The fraction of sources that were repaired the previous month that were found to be leaking this month.
 - (2) The fraction of sources that were successfully repaired after being found to be leaking in the previous months monitoring.
 - (3) The fraction of sources that were found to not be leaking during the previous month's monitoring that were found to be leaking during this month's monitoring.
 - iii. Using the information collected in Condition D(ii) above, determine the control efficiency of the leak detection and repair program as outlined in EPA's document 453/R-95-017 titled Protocol for equipment Leak Emission Estimates (page 5-54 through 5-57). Control efficiencies listed in table 5-2 (page 5-9) may be assumed for those components listed. Note, if these control efficiencies are assumed, the information required by Condition D(ii) above need not be recorded for that component type.
 - iv. Using the information collected above, determine the VOC emissions over the previous month from each section of the facility using the calculation methods outlined in EPA's document 453/R-95-017 title Protocol for Equipment Leak Emission Estimates (pages 2 – 11).
- E. At the end of each month, record the total VOC emissions over the previous month from the facility by adding the emissions total for each section as determined in Condition D(ii).

- F. As the end of each month, record the total VOC emissions over the previous twelve (12) months as determined in Condition E above.
- G. The owner or operator shall keep records as required in 40 CFR 60.486a, and reports as required in 40 CFR 60.487a.
- H. The owner or operator shall keep records and supporting information showing which process units are subject to NSPS Subpart VV or NSPS Subpart VVa. The facility shall provide a list of the process units, including which NSPS subpart they are subject to, to the Department.

Authority for Requirement: DNR Construction Permit 05-A-863-S4

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC	Recordkeeping	Monthly ⁽¹⁾	12-month rolling	Leak Emission Estimates

⁽¹⁾ See Condition 5 of DNR Construction Permit 05-A-863-S4 for the recordkeeping requirements.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP FS003

Associated Equipment

Associated Emission Unit ID Numbers EU FS003

Emission Unit vented through this Emission Point: EU FS003

Emission Unit Description: Cooling Tower

Raw Material/Fuel: Water

Rated Capacity: 18,500 gal/min

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.16 lb/hr⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-862

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.16 lb/hr⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-862

567 IAC 23.3(2) "a"

⁽¹⁾ PM and PM₁₀ are assumed to be equivalent. The limit is based on drift loss and total dissolved solids (TDS) limit of 2500 mg/L.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

- A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2,500 mg/L for any single sampling event.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall measure the electrical conductivity of the cooling water to determine the Total Dissolved Solids (TDS) on a continuous basis. The owner or operator is required to take (1) water sample per month over a three month period to determine the relationship between the TDS and electrical conductivity relevant to Voyager Ethanol. The determined TDS/conductivity relationship and the measured electrical conductivity value shall be used to determine compliance with the allowable TDS concentration.

Authority for Requirement: DNR Construction Permit 05-A-862

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV FS004

Associated Equipment

Associated Emission Unit ID Number: EU FS004
Emissions Control Equipment ID Number: CS004
Emissions Control Equipment Description: Dust Suppression
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU FS004
Emission Unit Description: Fugitive Dust Emissions from Truck Traffic
Raw Material/Fuel: Fugitive Dust
Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No VE ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"c"

DNR Construction Permit 05-A-864-S6

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 17.80 tons/yr

Authority for Requirement: DNR Construction Permit 05-A-864-S6

Pollutant: Particulate Matter (PM)

Emission Limit(s): 56.62 tons/yr

Authority for Requirement: DNR Construction Permit 05-A-864-S6

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Truck traffic on the haul roads shall not exceed 10 mph. The speed limit shall be posted on the haul road.

- B. Any spills on the road shall be cleaned up immediately.
- C. The plant shall maintain a monthly log that shows the vehicle miles traveled (VMT) for the paved roads and unpaved roads.
- D. The owner or operator shall update monthly the twelve-month rolling total of PM and PM₁₀ emissions by adding up the calculated monthly emissions for the previous twelve months. The plant shall notify DNR immediately if the twelve-month rolling total exceeds 56.62 tons PM or 17.80 tons of PM₁₀.

Paved Roads:

- E. Silt load performance testing shall be completed quarterly as specified by AP 42 Appendix C.1 (Procedures for Sampling Surface/Bulk Dust Loading) and C.2 (Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples).
- F. Performance testing on the haul road surface silt loading shall be completed on a quarterly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations.
- G. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
 - i. The date of silt load sampling event;
 - ii. The location of the sample taken;
 - iii. The measured silt content in grams;
 - iv. Sample area used for silt load sampling in meters; and,
 - v. The operator's initials.
- H. The plant shall maintain a log for the haul roads that show the following:
 - i. The silt content of the road for that month based on testing;
 - ii. The date of performance testing;
 - iii. The operator's initials.
- I. The owner or operator shall calculate and record the monthly haul road emissions according to the following formulas, which uses the equations from AP-42 Section 13.2.1, the empirical constants, and assumes a mean vehicle weight of 27.5 tons. (NOTE: silt load testing is required annually during the second calendar quarter. The "sL" value determined during silt load testing shall be used for each successive month that testing is not required. For example, the tested sL value for January would be used in the equations for February and March, and the tested sL value for April would be used in the equations for May and June etc.).

$$E_{PM} = \frac{0.011(sL)^{0.91} * W^{1.02} * VMT}{2000}$$

Where

E = tons PM per month

sL= road surface silt loading (g/m²) for each quarterly performance test

VMT = vehicle miles traveled (monthly)

W= mean vehicle weight, assume 27.5 tons

$$E_{PM_{10}} = \frac{0.0022(sL)^{0.91} * W^{1.02} * VMT}{2000}$$

Where
 performance test

E = tons PM per month
 sL= road surface silt loading (g/m2) for each quarterly
 VMT = vehicle miles traveled (monthly)
 W= mean vehicle weight, assume 27.7 tons

Unpaved Roads:

- J. The owner or operator shall apply chemical dust suppressants on roads at the rate and frequency required by the manufacturer's specifications to achieve a minimum of 75% fugitive dust control. Chemical suppressants shall be applied a minimum of once per month. If the selected chemical dust suppressant cannot be applied because the ambient air temperature (measured at the facility during daylight operating hours) will be less than 35 degrees F, or other weather conditions that in combination with the dust suppression application could create hazardous driving conditions, then the chemical dust suppression application shall be postponed and applied as soon as the conditions preventing the application have abated.
- i. The owner or operator shall keep records of dust suppressant application (date, location of suppressant application, and amount) along with documentation when environmental conditions meant the dust suppressant could not be applied as planned. The owner or operator shall also keep a copy of the manufacturer's specifications for achieving 75% dust suppression available for inspection.

Authority for Requirement: DNR Construction Permit 05-A-864-S6

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV FS006

Associated Equipment

Associated Emission Unit ID Number: EU FS006
Emissions Control Equipment ID Number: FS006
Emissions Control Equipment Description: Mist Eliminator

Emission Unit vented through this Emission Point: EU FS006
Emission Unit Description: Liberty Cooling Tower, 4 Cells
Raw Material/Fuel: Water
Rated Capacity: 40,000 gallons per minute

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.25 lbs/hr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 08-A-634-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.25 lbs/hr ⁽¹⁾, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2) "a"
DNR Construction Permit 08-A-634-S2

⁽¹⁾ PM and PM₁₀ are assumed to be equivalent. The limit is based on drift loss and total dissolved solids (TDS) limit of 2,500 part per million by weight (2,500 mg/L).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

Operating limits for this permit shall be:

- A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2,500 parts per million by weight (2,500 mg/L) for any single sampling event.
- B. The facility shall maintain the Cooling Tower (FS006) according to manufacturer specifications and maintenance schedule.

- C. The owner or operator shall conduct TDS testing on a monthly basis. Testing includes conductivity testing with a correlation to determine the TDS concentration.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain records of the monthly TDS sampling/testing results. The records shall include the testing dates and the methods used to determine the concentration of TDS in the circulating water.
- B. The facility shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Cooling Tower (FS006).

Authority for Requirement: DNR Construction Permit 08-A-634-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 43

Stack Opening, (inches, dia.): 336 (per cell)

Exhaust Flow Rate (scfm): 1,020,000 (per cell)

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 08-A-634-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to this plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP FS008

Associated Equipment

Associated Emission Unit ID Number: EU FS008

Emission Unit vented through this Emission Point: EU FS008

Emission Unit Description: Wet Cake Production

Raw Material/Fuel: Wet Cake

Rated Capacity: 30 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 2.08 Tons/yr

Authority for Requirement: DNR Construction Permit 17-A-440-S2

Pollutant: Single HAP

Emission Limit(s): 0.25 Tons/yr

Authority for Requirement: DNR Construction Permit 17-A-440-S2

Pollutant: Total HAP

Emission Limit(s): 1.12 Tons/yr

Authority for Requirement: DNR Construction Permit 17-A-440-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The WDGS production at the facility shall not exceed 50,000 tons per rolling twelve (12) month period.
 - i. The owner or operator shall record the amount of WDGS produced each month, in tons.
 - ii. The owner or operator shall calculate and record the twelve-month rolling total amount of WDGS produced, on a monthly basis, in tons.

Authority for Requirement: DNR Construction Permit 17-A-440-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): Open Pile

Stack Opening, (inches, dia.): Open Pile

Exhaust Flow Rate (scfm): Open Pile

Exhaust Temperature (°F): 200 (maximum)

Discharge Style: Open Pile

Authority for Requirement: DNR Construction Permit 17-A-440-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV FS009

Associated Equipment

Associated Emission Unit ID Number: EU FS009

Emission Unit vented through this Emission Point: EU FS009
Emission Unit Description: Cob Handling and Storage
Raw Material/Fuel: Corn Cobs
Rated Capacity: 180 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No VE ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"c"

DNR Construction Permit 09-A-509-S1

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP FS011

Associated Equipment

Associated Emission Unit ID Number: EUFS011a

Emission Unit vented through this Emission Point: EUFS011a
Emission Unit Description: Sulfur Cake Loadout
Raw Material/Fuel: Sulfur Cake
Rated Capacity: 30 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No VE ⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2) "c"

DNR Construction Permit 10-A-349-S2

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2) "a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): NA

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): Working & Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 10-A-349-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in *567 IAC 22.105(2)*. *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with

applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. **Initial Reporting of Excess Emissions.** An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. **Written Reporting of Excess Emissions.** A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two

working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the

emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in

order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

ii. The permittee's suggested draft permit;

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- a. Such applicable requirements are included and are specifically identified in the permit; or
- b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 22.111(1)*. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of *567 – Chapter 23* or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the

department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
U.S. EPA Region 7
Air Permits and Compliance Branch
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 5

7900 Hickman Road, Suite #200
Windsor Heights, IA 50324
(515) 725-0268

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Field Office 2

2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Linn County Public Health

Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix

40 CFR 60 Subpart A – *General Provisions*

<http://www.tceq.texas.gov/permitting/air/rules/federal/60/a/ahp.html>

40 CFR 60 Subpart DD – *Standards of Performance for Grain Elevators.*

[http://www.ecfr.gov/cgi-](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c094cb95f8b06d4ccecbbb2ff5c6704a&r=SUBPART&n=40y7.0.1.1.1.4740)

[bin/retrieveECFR?gp=&SID=c094cb95f8b06d4ccecbbb2ff5c6704a&r=SUBPART&n=40y7.0.1.1.1.4740](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c094cb95f8b06d4ccecbbb2ff5c6704a&r=SUBPART&n=40y7.0.1.1.1.4740) CFR 60

40 CFR 60, Subpart Db Requirements– *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*

<https://www.epa.gov/stationary-sources-air-pollution/industrial-commercial-institutional-steam-generating-units-new>

40 CFR Part 60, Subpart IIII–*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

<https://www.epa.gov/stationary-engines/new-source-performance-standards-stationary-compression-ignition-internal>

40 CFR 60, Subpart Dc – *Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units.*

[http://www.ecfr.gov/cgi-bin/text-](http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=032e902341db8873af7fe153511e9f67;rgn=div6;view=text;node=40%3A7.0.1.1.1.12;idno=40;cc=ecfr)

[idx?c=ecfr;sid=032e902341db8873af7fe153511e9f67;rgn=div6;view=text;node=40%3A7.0.1.1.1.12;idno=40;cc=ecfr](http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=032e902341db8873af7fe153511e9f67;rgn=div6;view=text;node=40%3A7.0.1.1.1.12;idno=40;cc=ecfr)

40 CFR 60 Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.*

<http://www.tceq.texas.gov/permitting/air/rules/federal/60/kb/kbhp.html>

40 CFR 60 Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006.*

[http://www.ecfr.gov/cgi-](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=bc4c913cc779deb441f61b794bf739ec&r=SUBPART&n=40y7.0.1.1.1.63)

[bin/retrieveECFR?gp=&SID=bc4c913cc779deb441f61b794bf739ec&r=SUBPART&n=40y7.0.1.1.1.63](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=bc4c913cc779deb441f61b794bf739ec&r=SUBPART&n=40y7.0.1.1.1.63)

40 CFR 63 Subpart ZZZZ – *National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

<http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf>